

Current Notes

Vol. 9 No. 5

June 1989

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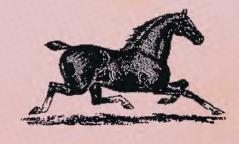
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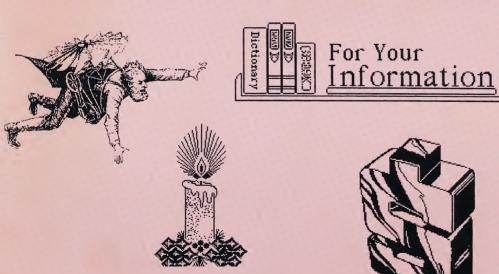
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- Know Your Clip Art A Look at Some Sources of Clip Art for **Desk Top Publishing**









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- □ ST-related review or article.
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TIME TO RENEW?

Check your mailing label. If you see an **8906** (6th month of 1989, i.e. June!) on the first line, then this is your **last issue** of CN. Get your renewal in right away to be sure you do not miss any issues. (If you see an **8907** or **8908**, your subscription will soon be ending. Please try and renew early—it is a big help to us.

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At about this time last year and the year before, I announced our choice for the Current Notes Author of the Year. This year, I'd like to delay that decision until the Atarifest in October. The banquet planned as part of the festivities seems like an ideal occasion to make the award. I'd also like to receive some feedback from our readers. Who do you think deserves to receive the CN Author of the Year Award for 1989? Dave Small received the award last year and Bill Moes and Bob Kelly the year before that. I would like the award to go to someone who has not received it, so earlier winners are ineligible. I don't really plan to make this an election, but I certainly would like to hear from you. Give me your opinion when you are sending in your subscription renewal, when you are ordering PD disks, or just send in a note with your preference.

One of our "specials" this month takes a look at Atari dealers and some of the successes and problems they have encountered. Atari claims to be signing up lots of new dealers. I don't know if that's true or not. I do know that, occasionally, a store will call us up and ask if they can carry Current Notes. Also, unfortunately, we periodically get issues back because one of our regular stores is suddenly out-of-business. From some of the stories I hear from dealers, I'm glad that I do not have to deal with Atari. For a company that is trying to expand their dealer base, Atari Corp. sure doesn't do much to keep the dealers they already have.

Atari officials wonder why it is that dealers aren't just waiting in line to carry Atari computers. This is a significant problem for Atari. After all, how can Atari make a serious effort to sell computers in the US market if they don't have a dealer base? But people who choose to sell computers can select from a wide variety of brands. Why should they carry Atari?

Tell me again, Atari, just what is it that you bring to the partnership? The computer, sure, but all your competitors also have computers. Do you help the dealers with advertising? Do you help the dealers with financing? Do you make it easy to get product from your company? Does your sales staff know who your dealers are and do they do what they can to help dealers? Do you have a sales staff? Do dealers make a lot of money on each Atari they sell? Do you, at least, keep dealer accounts in order or do your dealers have to spend hours trying to straighten out what should be simple account problems? I'm afraid the answer to most of the above questions is NO.

Many businesses operate under the philosophy that the customer is always right. They do everything they can to see that their customers are satisfied with the products they purchase. After all, they are looking for a long-run relationship and they want that customer to come back again and again. How many of us go back to a store where we have been treated poorly or where, we feel, we have been cheated or where the store continues to send us a bill for what was paid for months ago? Such businesses do not remain in operation for a very long time.

We are not Atari's customers. Atari sells its computers to dealers. The dealers where we purchase our computers and supplies are Atari's major customers. If dealers are not willing to purchase Atari computers, we will not be able to purchase Atari computers. Atari has to make some fundamental changes in the way it treats its customers or it simply won't have any chance of making inroads into the US market. I really hope they do.

Meanwhile, speaking of dealers, I certainly would like to provide Current Notes to Atari dealers around the country. CN is sold in some 140+ Atari stores. However, that's all the Atari stores I know about. There surely must be more. If you know of an Atari dealer in your neighborhood that does not carry Current Notes and if you think the dealership and your fellow Atari owners would benefit from CN, let us know and we will contact that dealer. In fact, if your recommended store becomes one of our CN stores, we will add a free year on to Te Waters your current subscription. By the way, CN guarantees sales to our dealers. If CN does not sell or the dealer is at all unhappy, we just buy the issues back. No questions asked.

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El-Cal Once More

Dear Joe,

I was really pleased (and, let's be frank, flattered) reading Chris Anderson's review of my program *El_Cal* in the last issue of *Current Notes*. I can only hope the program lives up to the expectations of the other users.

I completely agree with the reviewer, that adding linear algebra operations would make the program much more useful to the intended users: students, engineers and scientists. I am currently working on a linear equation solver for *El_Cal*. The code to do the actual computations is already there (some other functions need it); only the user interface needs to be written.

My agreement with Debonair Software is that this will be considered as an update (not an upgrade) of the program, so that it can be made available to the current owners for no additional charge around July. The algorithm to solve sets of *nonlinear* equations (Newton's method) will be, hopefully, also included in that version.

As to Chris's remark about the understated name of the program: this is a reaction to the trend of using words like "professional," "ultimate," "super" etc. in software titles, with nothing in the features to justify these claims. I really wouldn't like having my program sold to customers who judge it by the title (or by the box). Everybody knows, for example, that Touch-Up is by far the best pixelmapped graphics program on the ST market, and I really like the folks from Migraph for resisting the temptation to name it Ultra Graphics Professional Elite. It is up to our fellow reviewers in Current Notes and other magazines to help the paying public in making the proper choice (and we both know, that the CN bunch does an excellent job here).

One feature of *El_Cal* not quite clear from the review is that the program can fit a series of data points with *any* function, not necessarily a polynomial. Similarly, distribution fitting with *any* distribution, not necessarily Gaussian, is possible (although sometimes quite slow). These are, I believe, two very strong and quite unique features of *El_Cal*, though not many users will need them (maybe I'm wrong?).

The most important obstacle in adding more features to the program is the amount of memory available on the 520 ST (I am very reluctant to use overlays). Therefore any significant enhancement of *El_Cal* may force us into abandoning the 520's altogether and this is a tough decision to make.

The symbolic algebra is, unfortunately, out of the question. The program would grow too much, and, besides, I do not feel competent enough in this area.

The beautiful, powerful (and expensive) *Mathematica* for the Mac is something I would never compete against. The estimated amount of code in *Mathematica* is about 200 thousand lines, which can be translated into at least 20 man-years of work--and this does not include the effort on the mathematical aspect itself. \$800 for that program (with a relatively limited market) is, indeed, a moderate price, even if many of us cannot afford it.

On the other hand, *Mathematica* requires a considerable initial effort to learn it: you cannot use it 15 minutes after opening the package. *El_Cal* gives you considerably less power (although it has features not found in *Mathematica*), but this power is available instantly--and for 1/20 of the price.

As you may suspect, I have written *El_Cal* rather for pleasure (and my own use) than for profit; the market for this kind of specialized software on the

Atari ST is, indeed, very small and it would be unreasonable to expect to make any considerable profit on it. As a matter of fact, serving hamburgers in a fast-food joint would be a much more profitable way of earning extra income--but without all the fun.

This is also the reason why Debonair Software is being run as a shoe-string operation. Without investing much money in it, we do not risk much so a limited number of orders will not drive us out of business. This way, we can afford to stay around for the years ahead, improving *El_Cal* and working on other products.

Remember Sky Map from the CN Public Domain Library (#103)? In almost three years since it was released, I have received some very nice letters from the U.S., Great Britain, Ireland, France, Sweden, Germany and Australia, offering suggestions and asking for more. This Autumn should see a commercial version of that program, containing all 9,000 stars from the Yale Bright Stars Catalog and doing some things Sky_Map never was supposed to (running on color monitors, to start with). Once again: a program addressed to a very narrow audience, but what fun it is to write!

And one more remark: how did you manage to bring all those excellent writers to *Current Notes*, just for a song?

J. Andrzej Wrotniak Lanham, MD

Andrzej, you've answered your last question yourself, "but what fun it is to write!" -JW

More Mini-Reviews!

Dear Joe,

I want to go on record as saying that I think your magazine is one of the better ST publications (I subscribe to five of them!) If I had to put my finger on what it is about CN that makes it so good, I would say that it is so interesting. In addition, as a former English teacher, I appreciate the lack of spelling errors and the generally well constructed sentences. (Some journals, e.g., ST World, have an incredible

number of careless mistakes. Don't they have an editor??)

Secondly, I do like the mini review idea, that appeared in the April '89 issue. I was somewhat disappointed that Timeworks' Word Writer was not mentioned by someone because it seems to be an excellent piece of software for the average person. It is relatively simple to use, seems to have no bugs, and it has many nice features, including the spelling checker, thesaurus, and outliner. Also its price is reasonable. I doubt if I will ever buy WordPerfect simply because I have no need for all of its features and the effort and time to learn it could not be justified in my case.

I am pleased that Universal Item Selector was mentioned. It is incredibly helpful and very inexpensive.

I do like the idea of a "wish list" and I like the idea of the "most detested programs." (Although I wonder how the makers of these programs would react? Oh well, your readers come first.)

Robert Hochwalt North Canton, OH

Thanks for your own Mini Review of Word Writer. By the way, credit for the final edited look of CN goes to my wife, Joyce. She takes every perfect page I give her and invariably finds half a dozen errors! -JW

AIDS is Not Humurous

Dear Sir,

After examining a back issue of CN, I was impressed enough to subscribe and when I received my first issue and began flipping through the articles, found that decision justified. CN is, on the whole, highly informative and clearly written, this latter qualtity being especially appreciated by a computer novice like myself. In addition, Robert Millard's disparagement of a 'sexist sequence' in his review of King's Quest IV indicated the pleasant and unexpected bonus of a socially responsible attitude! So my disappointment was all the greater

when I read on to the following article, "Does Your Computer have AIDS?" by David G. Grace. While the use of the AIDS epidemic as a vehicle for humor may be debatable, I submit to you that humor at the expense of others is not, especially in print. I merely found the article tasteless and sophomoric; I am sure that a gay person would have found it to be even more offensive. In future articles of this type, Mr. Grace might consider using the pseudonym "Graceless."

Jim Magill Asheville, NC

Your point is well taken, Jim. Of course, no offense was intended. - JW

A Case of the Cheaps?

Dear Joe.

From my viewpoint, Current Notes racked up another great year in 1988. The World of Atari was presented in both its positive and negative perspectives (hopefully 1989 will have a

greater number of positive influences) keeping us both informed and entertained.

As a responsible Atari owner, the priacy problem that is constantly discussed continues to concern me. I can understand the problem WordPerfect Corp. has faced in marketing their product to the Atari community. Until the ST finds the proper niches for consideration by the business community, it will have difficulty selling its program to the average owner. But, after reading the letter by Gilman Louie of SPHERE INC., one has to wonder if, indeed, Atari owners have such a terrible case of the cheaps that they continue to refuse to purchase software. I certainly hope this is not the case.

Again, keep up the super job. You and your contributing authors truly offer an important resource for the Atari user and enthusiast.

Jack Link Crestwood, KY

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Late Night Reading

Even though "certified" as the only voice that speaks "authoritatively" for Atari, Sam apparently wasn't getting all the mail, directly. People were still writing Jack, as the Throne Behind the President. Rumors inside Atari are that toward the end of last month, one letter suggesting how Atari might get back into the U.S. market in a serious way attracted Mr. Tramiel's attention. Serious discussions ensued at the top of the company. This supposedly included Chairman Jack, trusted advisor Sig, and President Sam. So we continue to believe, that despite the near total lack of attention to American Atari users in the past 18 months while Atari had its U.S. operation well back on the stove, Atari does care. Atari is listening. And Atari intends to make this the "Year of the U.S. Market."

Atari's Phobia

One could understand, way back when, when chips were in scarce supply and there wasn't enough product for two continents, why Atari had decided that a national TV ad campaign didn't make any sense. Then at the turn of the year they designed a late winter ad campaign for the \$3,995 DTP package and the super discount for their laser printers. That was a regional effort with some TV advertising on CNN plus a few local stations. Then dealers were approached for joint ad packages, i.e. "all of you buy so much and we'll print advertising in your area with all of your names at the bottom."

Then at Comdex they announced this was to be "The Year of Atari" in the U.S. and ads would abound. National TV ads? No, print ads were better, but not national prints ads. And with that, Atari with—

Management, Merchandisers, Machines, & Marketing

drew, withdrew from the one vehicle that can bring a good, lesser-known product into market prominence. Read Don Elmore's article on Atari on Public TV in this issue. It describes a 30-minute national show about the ST, which was near spell binding for those of us who have never before seen anybody on TV mention the word ST, much less Mega ST and Atari laser printers. A mid-west dealer told us he hasn't sold a single Atari computer since the ads in his area stopped over two months ago. His inventory of 24 machines sits there staring out at might-be customers. Obviously, cost and profit play in any decision to step up your marketing power with TV ads, but it would seem that inside Atari, the most powerful marketing tool the world possesses, the Tube is viewed with fear and fright.

The only other explanation comes from CN author, Wm. Price, who while doing an extensive comparison of the ST and the Macintosh says, after offering high praise for the ST, "It's as if the designer of the ST [Shiraz Shivzhi] developed an instrument that Atari doesn't fully understand and is incapable of exploiting..."

Merlin Vanishes

The "Magician" at Atari, and before at Commodore, was Shiraz Shivzhi, Atari's potent electronic miracle worker. He spiderwebbed together those boxes that made Jack Tramiel, the aging-boy wonder of peoples' computing. He oversaw the birth of the ST, in less time than it takes to conceive in nature's way. Then he conjured up the Mega, then the TT. And now he's gone! The official version was for reasons of health, long-nagging problems generated by the pressure of the job had finally caught up with him. There was also the conviction that strong jaws had butted against each other. Sam's jaw was bigger. Shiraz had his staff cut by 75% as a result of losing "the rutting contest." And he quit. So who builds Atari's next machine?

Hats Off Award

The April issue was pristine, glistening with its 4 color cover and creative layouts inside. The news was there. The articles, reviews, and columns were balanced and well written. The adjectives are: handsome, intelligent, well-mannered, solid and well-groomed. Richard Decowski, the Publisher, Steven Lesh, the Creative Director, and Marian Carter, Editorial Director, and their group of staff and editors are obviously proud of what they are producing. They should be. With appropriate humility, we say, "Hats Off, ST X-Press!"

The Illusive TOS & Old Parts

Last month, the new TOS 1.40 was going into the ST Mega machines, or so Atari announced at Comdex. We were also told that one of the reasons it had been held up was because it and the new TT didn't get along. But the microbe hunters had cured all that. True, it wasn't coming out in upgrade kits yet, but it was going into the new machines. Now Atari is saying it won't be out until August. Hurry up! TOS 2.0 is rumored as almost here.

Incidentally, some dealers discovered when they opened up the new 1040 machines they were receiving from Atari, that they contained old insides made over a year ago. Boards that had been formerly manufactured for the 520's, i.e. they were 512 socketed (which meant intended for 520 machines). Nothing really wrong, they were in perfect electronic condition and ready to

run with the best of the 1040's. Just a suggestion somebody was saving on "old parts." Also, according to one dealer, the monitors are back to Gold Star. For some time they had been Samsung, with a high percentage of them "going down" after 3–4 months.

The Siren's Song

Atari, in order to double its U.S. machine base this year, is ostensibly turning up the volume full blast on its Dealer Recruiting Record. Various numbers float around as to how many new dealers they are adding each month. Regional reps who have the responsibility for producing "the scalps" must certainly be on the make.

Advanced Technology Networks, the Atari dedicated store in Gaithersburg, Maryland had been trying for 10 weeks, not only to become an Atari dealer, but to even get the regional rep, Kevin Jansen, to come to their store. That's 10 weeks of cancelled appointments and excuses. Now Mr. Jansen does have 10 states to cover, and he is new, just like ATN, but Finally, at the end of April, Kevin and one of the three ATN partners sat down at the store, which in space dedicated to the Atari is the second largest, after L&Y, in the Capitol area. Formerly, ACA of Gaithersburg, ATN was taken over by three Atari-dedicated, experienced individuals, Sing Yee, Tom Beatty and Stan Ward, who pooled all of their resources and set to work, intending to make a success of it. They had product from the old store, they had the repair kit that Atari demanded dealers buy, a band of occasional customers, and they knew their machines. Well, are they now accredited? Not quite. Jansen explained that, per Atari, they had to purchase another \$15,000 dollars of Atari machines, with \$\$\$ up front. Then fill out what one partner described as "a 30-mile long form, that would make writing War & Peace look easy." And, by the way, ves, ATN would have to buy a \$3,500 repair kit. That was an Atari rule. Didn't matter if they already had one. At the end of the meeting Jansen said he would try to get the initial outlay for machines reduced to \$12,000. At the next meeting he suggested ATN make him "an offer" as to how much they would buy. While this was going on Mike Dendo was telling dealers at World of Atari's Expo in Annaheim that new dealers could get started for "less than \$5,000 invested in machines."

Thus, we have a going store, with Atari computer experienced young men, who have banded together, dedicated to the idea that Atari is the best machine. And? And they may be forced to switch to IBM compatible machines. Listen, next month, to see if Atari's Mike Dendo can make reason prevail.

Loss of Control

They used to predict back when, that if the Soviet Union ever had motels, totalitarian control over the population would disintegrate. When the communists took over Laos a decade plus ago, the acting Minister of Information said that the most important thing he could leave behind to help over-throw the new government would be a mimeograph machine, which he intended to wrap and bury in his back yard. Now the current debate in Moscow is over PC's. What happens if they allow computers in the home? Well, glasnost may have already answered that. Gorbachev wants one million computers in the schools four years from now. How many PC's exist in all of the USSR right now? Interesting, about the same number as you have ST's and Mega's in the US--only about 200,000 of all types of personal computer machines for the entire USSR. But they've heard of the Atari. Chess Champion Gary Kasparov got two 1040 ST's from somewhere. He bestowed them on the computer club he helped organize according to Time Magazine, only to have authorities refuse to give the club any space unless they turned over ownership of the 1040's to the State. Reportedly, Kasparov then got 70 more ST's (again from where?) and with that "Mossport," the State Committee For Sports, wanted control of them. Glasnost triumphed and the children now have their 1040's. On top of that the U.S.-based chain of quick print DTP shops, AlphaGraphics Print Shops of the Future, that's spread over four other countries, has just gotten the O.K. to open two of their stores in Moscow, offering a full range of printing services. My, how things change. It used to be against the law in Moscow to commercially "print anything" without a permit. Now you can have your underground literature printed and bound and transmitted by the store to any one of its 250 stores in the AlphaLink system around the world. Or you can send your own "propaganda" brochures directly to Moscow to be picked up at Alpha-Graphics store (to be located not too far from the infamous Lyubianko prison). Who knows what 72 ST's and a dozen or so Davidovitch Smallov's may lead to.

Up Again, Down Again

After the high expectations that Atari surprisingly created at Comdex in Chicago in April, there were fervent hopes that they would sustain the momentum at the Atari World Expo in late April at Disney World Hotel in Anaheim, California. Atari was well represented with Sig Hartmann pushing future sales and Sam Tramiel in a meeting telling dealers "how good things are going to be....and we intend to sell 500,000 machines in '89." There also was the announcement that the DTP campaign, offering the Mega, a hard drive and a laser printer for \$3,995, had been quite successful. In the last 30 days, 400 DTP packages had been sold to dealers. A high rate of "pass thru" would be 75%, which means dealers actually selling to users one DTP package a day throughout the U.S. This news was accompanied by announcements that Atari intended to spend money, much money, on national TV advertising. However, the sums quoted by Sam, with a bit of figuring, came out to be about \$1 mil per quarter. On a major network, an ad that is carried throughout the country, i.e. "a national ad," costs about \$200,000 for a 30-sec spot in prime time. Initial dealer reaction was positive, but as they did their math, they concluded less than two ads per month was not exactly a "saturation" campaign. And then Atari backed off on even that.

Sam Tramiel also promised to a large group that the Atari TT (thirtytwo bit machine) would be out in August-September. Those that believed this would actually happen, remarked that the TT wasn't exactly new or advanced technology since both IBM and Macintosh had already put out their "030" machines and were now working on the next version with an 040 chip. They estimated that the excitement that brought buyers flowing into stores to buy the ST, "the new advanced machine," wouldn't be there for Atari's latest and newest. "Too little, too late" was the epithet.

What was exciting at Atari World? The Stacey laptop and the Portfolio which had stolen the show at Comdex, where Atari excelled, were already somewhat "old hat," even though they weren't even on dealer shelves yet. Everybody is holding their breath to see if Atari's pledge of 15 June is fact or fantasy. But new, new was Bill Teal's pcditto II board and John Russell's accelerator chip, called the "JATO Board." The former runs IBM software on your ST at 10 Mhz, twice as fast as rumored and ample for anybody wishing occasionally to turn their ST into an IBM. The latter, the JATO Board, will sell for \$150, and cost about \$50 for a dealer to install (requires desoldering and putting in new socket). A 16 Mhz chip, it loads Page Stream about 20 % faster and will double the speed of some, but not all, calculations.

Then there was the Midi interface and music galore. Dealers acknowledged that Atari had a "near lock" on low end computerized music with their Midi interface for the Mega's.

New & Newer

DeskJet II is here. The original dark-is-dark ink jet printer was an instant hit. DeskJet II is four times faster. MacWorld Expo in Washington, D.C. showed a 19" Moniterm monitor for the Mac running in high rez color. David Small's Spectre GCR won't be out until August, if he can fix the pal chip and get FCC approval. But is he also working on a Mac II emulator for the hard to see TT? That would seem doubtful, i.e. 256 TT's were to be shipped to developers in May, but none have been seen so far. Is a new Atari GDOS on the way? One without line fonts, that does away with the "jaggies." We believe so.

Copy This

Navarone Industries is a leader in ST scanners, be they flat bed or sheet feed. As professional hardware, the prices are up there, ranging from circa \$1,300 to \$1,800 for the flatbed. As you scanner skilled users know, the Navarone scanner will turn either photos or line drawings into digitized information which can be saved and loaded back into documents, boxed in various sizes. Will it do text, the newcomer asks? Yes, but it treats it as a picture or a drawing and thus, though it can be loaded into other documents, just as you'd bring in any graphic, it can't be edited, experience font manipulations or any of the things you can do with truly digitized text that is turned into 1's and 0's via optical character reader software.

But Navarone is about to issue the software that would turn their scanner into an optical character reader for the ST. The question is will it be affordable to the average ST user and how many different font faces will it be able to read. In the meantime, Navarone has an STCOPY program that turns your scanner plus laser printer into an instant copy machine. Part of the beauty of it is that it will make a line

drawing or a page of print actually darker and seemingly sharper than the original. A quality piece of software, where you insert your picture, page, or graphic and once scanned, about 12 seconds, you can print out as many copies as you wish at whatever speed your printer operates at. Well, done, Navarone.

When Did It Happen?

The home computer, the personal computer, came out several vears before IBM even bothered to look. Then somebody in that tightly, recently, well-managed company made the casual decision that they ought to test the PC market, since numbers were suggesting it might be profitable, if not big. It took the Atari ST less than 18 months to support their machine with several hundred programs, less than half the time it took Macintosh to do the same thing, but they started earlier. On a field tilted against IBM by almost 36 months, they called their first play. Within 18 more months they not only had software, but they had dominated the PC market. They were within an inch of becoming the "non-destructible" standard for PC's. Such is the art of "power" marketing (something Atari is still experimenting with, without any idea of what the adjective means).

And so is competition in the home computer market dead? Well, not exactly. In 1988 Macintosh sold more PC computers than IBM did.

Return of the Titan?

BBS's were buzzing with word that WordPerfect Corp. was rejoining the Atari action. Their overdue update of *Word Perfect 4.1*, the predominant word processor for the ST's, was expected to ship by the middle of last month, replacing the 8 Aug '88 version. But the significant news, not yet corroborated by us with WP Corp., was the statement that WP Corp. was reforming its disbanded Group For ST Development and it would continue to enhance ver. 4.1 and eventually release ver. 4.2. Why the change?

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Advanced Technology Networks



XE/XL Update

Len Poggiali

Atarian

A few months ago I mailed \$15.00 of CN's hard-earned cash to the Atarian Club, 7 Hilltop Road, Mendham, NJ 07945. Recently, my membership package arrived. It included an oversized, black "Atarian Inside Me" T-shirt, a club sew-on patch, a membership card, and the first issue of the new bi-monthly ATARIAN magazine.

Similar to many of the other video game magazines currently on the market (e.g., VIDEO GAMES AND COMPUTER ENTERTAINMENT), ATARIAN is filled with color photos, short articles, reviews, etc., printed on glossy paper. At \$1.95 an issue (\$2.95 Canadian), ATARIAN is hardly a steal; nevertheless, for news-starved 2600, 7800, and XE system owners, a little bit is better than nothing at all.

The first few pages include letters to the editor and the results of a subscribers' poll of favorite games for each system. *Hardball* came in first for the XE system and *Mario Bros.* for the 7800.

The next section covers previews of upcoming titles. These include three XE offerings: Commando and Ikari Warriors, two Rambo-esque shoot-'em-ups, and Xenophobe, which has you battling space aliens. In addition to these, 7800 owners can look forward to arcade favorites, Double Dragon and Rampage, and a sports simulation—Pete Rose Baseball (will this version contain a betting option?).

An interview with Nolan Bushnell follows the preview section. In it, the original Atari founder discusses the state of the video game

industry, the future of the market, and games he is designing or has designed for the 2600 and 7800.

Game reviews appear on the next seven pages. XE offerings are Fight Night, Summer Games, Karateka, and the new light gun game, Crime Buster. All but the last named are available for the 7800 as well. Additional 7800 titles covered include Tower Toppler and Impossible Mission. Each of the ten reviews is well written and long enough to give the reader a good idea of the product's plot, characters, play value, and such. What is disturbing, however, is that all ten are highly favorable. Is ATARIAN an objective periodical, or merely a rah-rah magazine?

A less-than-critical review of the XE Game System follows, then three pages of tips for playing Necromancer, Donkey Kong Junior, and Desert Falcon, and a few more pages of briefer clues for handling another dozen games. Interspersed are descriptions of contests (one for detecting poor grammar in the magazine), a two-page comic entitled "The Adventures of Atari," and a page of puzzles. All in all, not a bad beginning for the new publication.

Label Master & Multi-Column Lister

Black Moon Systems of Wind Gap, Pennsylvania, continues to support the 8-bit line. The company's Moonsoft line of productivity programs comes on self-booting, non-copy protected disks.

Label Master, compatible with any DOS, allows you to create and edit data onscreen. You design your label in a 6-line-by-36-character

area. You can save and load labels from disk and print out any labels you want using the Group Print function. You can build mail lists by creating .GPF data files from your Group Print directory. There are a number of other advanced features available.

Multi-Column Lister (version 1.2) resides on the flip side of the LabelMaster disk. This machine language program allows you to print out your LabelMaster data files on labels or paper from one to four labels across. This utility supports all printers. You may also use MCL to print out your .GPF files created using LabelMaster. SpartaDOS users can print out by sub-directory or sub-directories from A-Z. You also may view a disk directory and set the number of lines between labels from the Main Menu.

Improvements are being made almost daily. Proof of this is that Blue Moon sent me an even newer version than the one mentioned above about two weeks after mailing me the first version.

The disk containing both programs may be purchased for \$10.00 (postage and handling included) from Black Moon Systems, P.O. Box 152, Wind Gap, PA 18091. For those already owning earlier versions, the update runs \$5.00 (with return of your original disk).

A third Moonsoft product is the Small Business System. SBS is a group of programs that allows the small business owner to run his business on an Atari computer. Features include invoicing, purchasing, income and expense entry, an end-of-year inventory module, and a reports module. Reports can be generated by month, any consecutive group of months, or by year. There also is a sales and tax report and a profit/loss report in the reports module. At \$30.00 (\$10.00 for update), SBS includes Label-Master and Multi-Column Lister.

New Carts At Last!

A few days ago a shipment of new XE and 7800 game cartridges arrived at my home, courtesy of Atari Corp. Among the XE titles were *Dark Chambers*, *Airball*, some old friends (*Choplifter* and *Karateka*), and two light gun games (*Crime Buster* and *Crossbow*).

Dark Chambers is a 26-screen Gauntlet clone which features three levels of play. Treasures, weapons, hazards, and nasty creatures abound. In Airball, you have the dubious chore of moving an inflated ball through a series of three-dimensional screens. The plot is unique, and the leading character (the ball) is a far cry from the average superhero.

The era of the great gangsters is reconstructed in *Crime Buster*. Mobsters and innocent bystanders appear in four game screens: at the harbor, the pier, the alley, and downtown. Unlike earlier XE shooting games (*Bug Hunt* and *Barnyard Blaster*), the bad guys shoot back. To win the game you must clean out twelve crime areas. Traveling be-

tween areas also can be dangerous. Along the way, you will be attacked by mob hit teams riding in 1930–vintage automobiles.

Exidy's past arcade hit *Cross-bow* sends four adventurers through eight different challenging screens full of creatures of all types, each bent on eliminating a member of your party. After blasting your way from town to forest to castle and such, you finally encounter the evil wizard who must be destroyed in order for the king's treasures to be restored.

Hopefully, Atari will release the light gun separately so that all 8-bit owners will be able to purchase and play the four games released so far. Interestingly enough, the 7800 version of *Crossbow* will accept the light gun as an alternative to the joystick. Perhaps this bodes well for the gun's wide availability in the near future.

Other 7800 titles sent were Hat Trick, a one-on-one hockey con-

test, Electronic Arts' Touchdown Football, Accolade's Ace of Aces, EPYX's Impossible Mission, Lucas-film Games' Ballblazer, and two new titles—Cracked and Tower Toppler.

The former is a cross between Barnyard Blaster, Big Birds Egg Catch, and the skeet shooting event in Summer Games. Various animals want to steal your eggs from their nests. To succeed, you must keep these pests from flying or running off with your cholesterol-laden valuables. The game involves lots of animal killing, egg catching, and trying to control your joystick.

Tower Toppler has been touted as the 7800's answer to Nintendo and Sega's more sophisticated programs. As Pogo the space pig, you must run, jump, and shoot your way to the top of eight different towers. Graphically, this is the most interesting of the new crop. Whether the game play is as good remains to be seen.

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A View from the Coast....

by Ron Ariel

The ST Bargain. As 1989 opened, Atari computers provided the highest capability, per dollar spent, of any brand on the market. The Atari 1040ST, which easily outperforms the Macintosh SE and most IBM clones, sells for under \$1,000.00 even in its most lavish configuration. It recently was named "Best Computer of the Year" by a panel of editors including those from Personal Computing (US), Practical Computing (UK), CHIP (Italy), and seven others across Europe. Last year's award winner was, significantly, the 520ST.

A Move to Germany? April Fool's Day came with the news that Atari was preparing to exit the US market and relocate its headquarters in Germany. While not unlike most pranks carried out on this day for jesters, this story was lapped up from Sunnyvale to San Diego, Santa Monica to Miami, by readers eager for news, any news, from a company which could never call communication its forte. Buying from Atari was, as one user put it, "riding a one-lane road between the peak of computer nirvana and a black hole."

No, But... The April Fool's story has some basis in fact. Atari dealers we talked to believe Atari has not provided sufficient resources and coordination to support a strong dealer network. While all its computers and software were available by mail order, retail space is essential to demonstrate products and convince the public to buy them. Further, Atari has succeeded in persuading few customers that its systems were good for business, where most other computer makers grab their market share. Atari has also

fallen behind in introducing new hardware, essential for continued sales growth.

World of Atari Revival. On Saturday, April 22, Atari opened its "World of Atari" trade show at Disneyland to the public. Dozens of booths boasted everything from new computer systems to peripherals; software vendors offered a myriad of new applications, including small business and retail store operations, desktop publishing, music and games.

A complete desktop publishing system. displayed at World of Atari sold for under \$4,000.00; it sports a computer with four megabytes of RAM, a 30-megabyte hard disk drive, an eight-page-per-minute laser printer with 50 fonts and desk-top publishing software. "Apple's Macintosh can't dream of matching that," one user chuckled. Other new hardware, announced in April, included a 44-megabyte removable disk cartridge system, and a new laptop, named Stacy.

Two Weaknesses Remain. While the array of vendors and products was impressive, two weaknesses were exposed as well: Atari has not updated its CPU, thus falling behind Apple and IBM in the technology race, and software for Atari computers is more difficult to obtain than other computers' at the retail level. Most vendors receive the majority of their income from mail orders. One developer remarked "It's too expensive to support a store stocking two or three copies (of a program) at a time."

Atari in the Technology Race. Despite the new products, some dealers feel Atari may be losing the technology race against its competitors. Atari's best machine relies on the Motorola 68000 CPU, whereas Apple has already introduced advanced Macintoshes, albeit at a much higher cost, utilizing the most advanced chip available. Atari's high-end sales number in the hundreds; Macintoshes sell by the thousands. The Macintosh II, IIX, and SE/30 promise to reclaim the high ground for Apple unless Atari acts soon.

Joe Mendolia, Vice President for Marketing of Atari Computer, is not especially concerned by what Apple has been placing inside the Macintosh's case. "The 68000 has been around awhile, but software developers haven't fully exploited its capabilities yet. We can improve the Atari's performance with better programs," he said, "while Apple is forced to hike prices to pay for its newer chip."

Software publishers seem concerned, however; one large distributor's priority for marketing software consists of serving the IBM/ clone market first, followed in descending order by Macintosh, the Apple IIGS and then the Atari ST if enough customers ask for it. Given that future programs can take advantage of special features available on new CPU's but not necessarily on the 68000, one might expect that ST support is threatened unless Atari decides to upgrade its machines. Any trouble in software support can hurt Atari's retail dealers.

Atari in the Retail Market. How strong is Atari's retail presence, and what is its potential for growth? Atari Corporation President, Sam Tramiel, declared in a press release dated April 10, 1989, that Atari has "focused its efforts on building a strong, national dealer base. We are re-building our national distribution channels from the ground up."

A recent advertisement placed in the Los Angeles TIMES listed twelve dealers in an area stretching from Burbank to San Diego, a hundred miles away. In addition to these independent proprietors, Atari computers and software are also sold at Federated stores, a 65-store electronics chain which Atari chairman Jack Tramiel bought but is trying to sell after several years of red ink.

With fewer dealers than other brands, Atari faces two vital tasks: maintaining a strong, supportive relationship with existing dealers, and increasing their number and Atari's visibility in storefronts. Atari has enjoyed mixed success here; while some dealers remain fiercely loyal, their number has remained small compared to other brands.

"At no time, nor for any reason, will we violate or jeopardize our dealer channels," Tramiel has stated. While this certainly is something Atari's dealers have wanted to hear, their loyalty has been sorely tested a number of times.

Dealer Experiences. Al and Jane Hughes opened their computer store, Mid-Cities Comp/Soft, when Al bought a Commodore VIC-20 and saw the potential in personal computer retailing. Mid-Cities moved to its present location in Bellflower, California and became an official Atari dealer in 1985, when the Hughes' took delivery of the first ST models. They sold well enough to justify dropping the Commodore and Leading Edge computers which competed for shelf space.

"As a computer manufacturer, Atari has serviced us very well," Al told this interviewer. "We've received shipments of computers as fast as two or three days after ordering and the quality of the workmanship is always excellent."

Since they opened, Atari software availability has grown tenfold. "(In 1985) I only had five software titles to offer my ST customers— Neochrome, First Word, Haba—not all of it very good," Al Hughes explained. "Now I have everything desktop publishing, word process ing, spreadsheets, music and accounting. We can do anything the other computers can do, cheaper and better."

Atari's dealer policies and lack of communication, however, have been sore points for the Hughes.

"We don't know from one day to the next what Atari will do," Jane complained. Promotion planning is difficult, she noted, mainly because of Atari's unpredictable pricing. "We advertised our machines, then had

Atari's dealer policies, lack of communication, are sore points....

to buy computers at a higher cost when Atari suddenly charged us more money. But we had to honor our advertised retail prices to keep customers happy. It's hard to make a profit that way."

John Abney owns and operates Comp/Soft, a two store chain in the San Fernando Valley. "Dealing with a manufacturer is never a bed of roses," he notes. "They're inconsistent, they don't tell you what they're supposed to, and sometimes they'll even try to dump outdated merchandise on you." Abney places Atari, overall, "in the upper 25%" of manufacturers he has dealt with. He credited Wayne Smith, Atari's dealer representative, for much of the good relationship Comp/Soft has had with Atari: "He always keeps in touch." Deliveries from Atari are fast and on time, and Abney has nothing but praise for the design and quality of the ST computers. "JPL bought some ST's and I hear they're the closest you can get to mil-spec in a commercial product," he beamed during a recent interview.

Abney complained that Atari lacks a consistent sales plan and good public relations to back up its products and dealers. "Atari's dealers need some corporate muscle" behind them to launch effective campaigns.

The Federated Strain. Atari's dealer network has been hurt the most, however, by anger and resentment stemming from Atari's ownership of Federated. This gave rise to a potential conflict of interest, since any improvement in Federated's income reflected directly on Atari's balance sheet, whereas, of course, this was not true for its independent dealers.

Jane Hughes remembered when Federated was described as a game store only, not slated to carry the ST line, expensive high—end peripherals or business software. "Atari told us only certain dealers could carry ST's. We had to meet certain requirements, and every addition to our stock of ST's needed special amendments to our sales agreement with Atari," she noted. "Then we found out Federated was carrying them too."

Then, in December 1987, Atari insisted that dealers wanting to sell the Mega 2 or Mega 4 ST computers maintain full-service store-fronts; these were to be designated "special business centers," according to Hughes. Al and Jane had applied for this status well before the Mega machines were released, and found to their dismay that Federated's own "business centers" were the first to receive the new machines.

This apparent favoritism "caused other stores to dump Atari and sell competing lines," Al says. "It isn't fair for stores (which are not held to the same standards Mid-Cities was) to call themselves 'Business Centers' and then discount so low that we lose our entire profit margin on a high-end machine."

Comp/Soft's Abney agrees. "Federated was the hardest lump to take. Atari was wearing two hats. Atari management never told us a straight story about Federated." Comp/Soft found itself competing against other dealers instead of

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pooling with them to increase their products' total sales.

Sam Gibbs, General Manager of Federated's Westminster region. denies all the charges of favoritism. Federated, which sported a large triple booth at the World of Atari trade show, did not receive any special favors, he claimed. "Atari doesn't treat us preferentially," he stated. "Our relationship with our vendor (Atari) did not change after the purchase and it will remain the same after Federated is sold." Gibbs continued that Federated, which sells a complete line of computers, peripherals, business music and game software, began satisfying the same demands other dealers met "long before Atari bought us." Gibbs looks forward to continuing a long-term relationship with Atari, saving that "with the other brands, like IBM or Commodore, the quality just isn't there."

Atari Computer's Mendolia indicated that Federated would remain an Atari dealer after its sale. qualifying for Atari's business on the same terms as its other dealers. Whether this move mends fences with the other dealers remains to be seen; further, a question remains as to whether Federated can do Atari any good. The chain attracted a great deal of attention several years ago through its unique, eccentric advertising featuring celebrity Shadoe Stevens as "Federologist" Fred Rated. Since then, Circuit City and other chains expanded at Federated's expense by offering a wider range of electronics and appliances. Federated lost its appeal to many consumers and is now downsizing; its value as a retail outlet for Atari is dubious in the eves of dealers and many customers. "If I were religious," John Abney remarked on hearing of Federated's impending sale, "I'd light 100 candles church."

A New Thrust into the US Market. Mendolia acknowledges that Atari's efforts in the retail marketplace have been inadequate; he attributes this situation to a recent

focus on Europe, where, he says, Atari has been very successful. "We've displaced the Macintosh as the top selling small business desk top in Germany."

"We will be making our thrust in the US this year," he said confidently. In order to better focus on the domestic market, Atari underwent a reorganization: the ST computer line is now built and marketed by Atari Computer, a subsidiary of Atari, Inc. This new unit has its own development, manufacturing and marketing staff and operates independently from other Atari units, including the entertainment concern.

Atari Niche Markets. "Atari Computer has found its niche markets—desktop publishing, office productivity and small business—areas ignored by other makers. We plan to work more closely with third parties to develop applications there," Mendolia explained.

The niche strategy holds some potential if Atari can execute it properly. The quality and quantity of software available for the ST has certainly increased. Dealers have reported rapid growth particularly in the MIDI market, and Atari can benefit whenever an electronic synthesizer is sold. Crowds of enthusiasts gathered around the keyboards at World of Atari, trying out the latest programs and waiting for an evening rock concert whose musical "controller" would be a Stacy laptop.

Atari and its third-party vendors have taken aim at retail stores as well, with Point-of-Sale (POS) systems that provide cash register, accounting and inventory functions. Some provide bar code wands as well. Several were in operation at the trade show, including a particularly handsome arrangement that rang up sales for Mid-Cities. Jane Hughes is happy with it; so are many other users.

Atari's small user base, however, makes clear the problems Atari has with achieving a significant impact on the business market. David Beckemeyer, President of Beckemeyer Development Tools, estimates his firm will sell around 5,000 such systems in 1989; customer feedback has been "phenomenal" but, with the size of the market and how much Atari holds of it, he could not predict any significant increase beyond that annual figure.

Atari has always been a hacker's favorite; one can find ST compilers for all such important languages as C, COBOL, PASCAL, FORTRAN, PROLOG and LISP. Whether it can become a business favorite depends on Tramiel's success in giving Atari Computer a decidedly "business" look and improving the dealer network. This, in turn, depends on just what resources Atari can bring to bear.

Atari Ads? Mendolia outlined a "national advertising camnew paign" being launched by Atari computer that will target 25 key cities. While both electronic and print media will be included. Atari will not buy network advertising, and will spend much of its ad budget on direct mail pieces. "Network ads are too expensive and won't produce the response we want," he explained. At least one skeptic described this latest effort as "vintage Atari policy -- too little, too late."

Atari & Unix. Atari's survival in the personal computer market is vital to many people, especially those who could have never owned a 32-bit machine were it not for the company's low prices. Even if Atari cannot significantly improve its position by bringing more people to its machines, one display at World of Atari suggested a way to bring Atari to the people, while retaining its own identity. Beckemeyer Development's booth contained a 1040ST running UNIX, AT&T's operating system, which succeeded in uniting VAX minicomputers, IBM PC's and clones into unified networks offering powerful distributed processing applications. Perhaps Atari can grow, too, by adding an important spoke to this large and popular wheel.

The ATARI ST ON NATIONAL TV Only Atari Wasn't There

By Don Elmore

Saturday morning, 9:30 am (April 29th) having just dipped into the job jar and looking at mowing the lawn, painting the shed or attacking the weeds in the vegetable garden ... I did what any red-blooded "Atarian" would do. I made another cup of coffee and tuned in PBS Channel 32 (WHMM) to watch "Computer Chronicles." Wonder of wonders, the program hosts, Gary Kildall and Stewart Cheifet announced that the entire half hour would be spent looking at the Atari ST and some of the commercial and professional uses to which it is being put.

ment dealt with the MIDI interface and described a university music studio using the ST and *Master-track' Pro* software (from Passport Design) that produces a sequencer that provides 64 multi-channel recording tracks. It was described as having thrown standard musical theory out the window, a new tool that has music education scrambling to keep up with computer technology.

Cyber Paint and Spectre. The next segment featured Vince De Felippo (an Atari specialist from Winner's Circle, a computer store in Berkeley, CA) and Jim Kent (author of Cyber Paint). Jim demo'ed his Cyber Paint program and Vince showed off the Spectre cartridge.

Gary began by stating that Atari offers a lot of computing bang for your buck and asked Jim Kent why he chose Atari as the main platform for "Cyber Paint." Two things, the first, a 68000 processor—so he wouldn't have to deal with strange memory fragmentations—and the second, the Atari color capabilities.

Gary said that Amiga is often mentioned as a standard in the color field. Jim responded that Atari's color is as good and it is considerably cheaper ... plus it is much more reliable. He said that he has lost many floppy disks on the Amiga.

Gary then asked Vince De Felippo what the Spectre 128 is, noting that he is seeing a Macintosh screen. Vince explained that Spectre 128 is a Macintosh emulator for the Atari that runs Macintosh software, including *Hypercard*, and does it 20% faster than a Macintosh system. Gary asked if there is also a simulator that can handle MSDOS and Vince described *pc-Ditto*.

Atari Aquarium. "Computer Chronicles" then went to the Steinhart Aquarium in San Francisco to report on using an Atari ST to assist with communications between humans, two dolphins and three seals. The fish, by pressing one of several pipes under water, can request a snack, a ball to play with, hands-on petting or a spray of water. Eric Carlson, marine researcher, said that he uses GFA Basic to write the programs supporting projects. He likes the graphics capabilities of the Atari ST and also its sound generating abilities.

DynaCADD and Calamus. In the last program segment, Andrew Reese, Editor of STart and Nathan Potechin, President of ISD Marketing demonstrated DynaCadd and Calamus, respectively. Andrew described the Mega-4 setup, a 68000 processor, 30 meg hard drive, Moniterm monitor and a SLM804 laser printer...all for \$3,995. Kildall commented that that is less than what you might pay for just a

laser printer! After putting *Dyna–Cadd* through its paces, Stewart asked how Andrew would compare it with the industry standard, *Auto–Cadd*. Reese said that *DynaCadd* runs faster, has a better interface

"...has had a 520 (upgraded to 2.5 meg) for two years without any down time..."

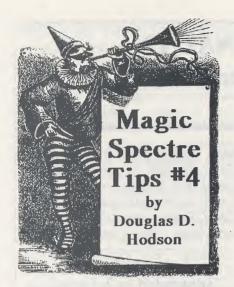
and would be equivalent to *Auto-Cadd* version 10!

Kildall said that not many people know about the Atari ... what about its reliability? Reese said that he has a 520 St upgraded to 2.5 meg and he has had it for two years with no down time (except for the loss of a sound chip ... which was absolutely his fault and not the computer's).

Potechin wound up the program with a very interesting demo of *Calamus*, describing it as a professional level entry desktop publishing program with over 350 different features. Importing a prepared page of print, Nathan went through some of the features and then printed the page out. He ended his demo by holding the printed page up next to the screen and showed how it is truly "WYSIWYG."

Andrew Reese, in the program's closing statements, said that 1989 is the year of Atari and said that we could look for massive advertising.

But Where was Atari? It was a very interesting program and I couldn't help but notice that while Potechin could travel from Toronto to the West Coast and be on the program No one from Atari Corp (already on the West Coast) could take the time to attend!



Introduction

Here we are again, this time for some fun with the hard disk. It's been my past experience that configuring the hard disk for use with the Magic Sac can be VERY confusing. In fact, at one point I had so many phone calls concerning hard disk installations that I started charging \$35 for a complete hard disk format and partition job (this did include PC-Ditto installations as well). This business went quite well, but users still managed to find ways to crash the system. Who gets the blame? You guessed it. I'm very cautious about whom I set up right

So much for the weeping, how hard is it? Installing Spectre on hard disk is trivial. Installing the Magic Sac, well... Most of the following discussion will center around Magic Sac hard disk installation.

Welcome to Hard Disk Land

So you finally did it, you forked out the big bucks for that new hard disk. Now you can configure your ST system to not only emulate a Mac, but also emulate a very, very fast Mac. The addition of a hard disk to the Magic Sac is like adding a turbo to a car.

Before we get into the nitty gritty, I would advise (in fact demand) that you backup any soft—ware that you currently have on your hard disk! This is a precaution in

Bye, Bye Floppy Flipping

case you make a mistake (or most likely, I make a typing mistake). After all, if we are going to format it, we'll need to restore it, so make a backup!

Yes. Plan Ahead

To properly set up the hard disk we need to do some planning. First, you must ask yourself these questions. Do you plan to use your Mac emulator often? If you answered no, use the section entitled "Small MAC Setup" for instructions on setting up your hard disk. If you answered yes. do you plan to use a lot of different software for the Magic Sac or did you buy it to run one or two packages only? If you plan to use your Magic Sac often but only for a couple of software packages, also use the section entitled "Small MAC Setup" for your configuration. The only people left should be the people who are truly turning their STs into full fledged Macs. For all of these people, read the section "Full Blown MAC Setup" for your configuration. Note, I make the assumption that you have a 20 megabyte hard disk.

Mac Doesn't Share!

You can store all of your Mac programs on the hard disk but NOT intermixed with standard ST programs. In other words, you must dedicate hard disk space to the Mac. After this space has been reserved the ST no longer "sees it." If you dedicate 10 megabytes of hard disk storage to the Mac, then your ST no longer has access to that 10 megabytes. I should rephrase the last sentence. Your ST has access to the 10 megabytes, but GEM does not!

In order to change the allocated space, you must reformat your hard disk! Don't make these decisions lightly. I used to change my hard disk configuration setup often,

because I failed to plan ahead.

Both Mac emulators (Magic Sac and Spectre) reserve space on the hard disk by taking over complete control of a hard disk partition. If you have four partitions set up on the hard disk, and dedicate one of them to be a Mac formatted partition, then after the formatting is complete, you can no longer access this partition with GEM.

Only the Mac can access it. In principle, setting up the hard disk for the Mac is simple, just format one of your partitions on the hard disk in Magic (or Spectre) format, and away you go. That's just about it for Spectre, but the Magic Sac is different. If you are a vintage Mac user, you're probably aware of the two different formatting schemes used by Apple. In the early Mac years, the MFS formatting scheme was used; later Apple implemented HFS.

Is It Real Or Is It MFS?

The MFS formatting scheme is, by far, the simplest to use when setting up the hard disk, but as with anything else in life, it has its limits. MFS (Macintosh Filing System) does not have provisions for creating "real" folders. All files are located in the root directory. So if you use a large number of files, your hard disk access time drops considerably (believe me, I know!).

MFS does "emulate" folders. In fact, it emulates folders so well that you might not even notice that these folders are not "real." The apparent folders on the desktop are only an illusion to the user. If you're not convinced of this illusion, create two folders and give them unique names. Then copy some file, any file, into one of the "folders." Next copy the same file into the other "folder." Did you get a message saying something like "name already exists or replace file?"

There's your proof. If real folders were created by the computer, this message would never be shown.

So how do I create real folders? You guessed it, use the HFS (Hierarchical Filing System) formatting scheme. (Note: Spectre uses HFS by default.) How do I use HFS with the Magic Sac? First you need to format the partition (wait, don't do it yet!, read on) into HFS format. Then you need to load a program called Hard Disk 20 on bootup (that is, when the Mac boots). The file is placed in the folder called System Folder, which also contains the Finder and System files. When this disk is booted, Hard Disk 20 will be loaded.

About HD 20

The name "Hard Disk 20" makes the program sound as though it is used with hard disks only. This is not the case at all, HFS can be used with floppys. If you think of the "Hard" part as being real folders or "Hard" directories you can eliminate the confusion. I don't know if this is what Apple meant when they named it, but it's easy to remember.

About this time you're probably asking vourself, why does Doug keep saying HFS is hard to install? I thought you would never ask. It's not hard to install, but some more ground work does need to be covered. First of all, if Hard Disk 20 is not installed, the Macintosh can only read MFS format. You say no big deal, just install it. Not quite, remember when the Sac boots, all it knows how to read is MFS. This means that the boot disk or boot partition must be in MFS format. After the System and Finders are loaded, Hard Disk 20 is loaded. After Hard Disk 20 is loaded, the Magic Sac can read both MFS and HFS format. This means that you can format a hard disk partition in Magic HFS format but you must boot the Magic Sac with something that is in MFS format (as it can't read HFS format until Hard Disk 20 is loaded). Whew!

Booting the Sac

Notice I said, you must boot the Sac with something! What is something? Something can be a floppy disk formatted in MFS format or a hard disk partition formatted in MFS format. What does all this mean? It means that in order to boot the Magic Sac off the hard disk and install Hard Disk 20 (enabling HFS operation), you need two Mac partitions. One partition is in MFS format. which is where the Magic Sac will boot from initially. The other one is in HFS format, which is the partition the Mac can now read and write after the MFS partition has been booted. Understand?

Hold On!

Although your fingers are probably getting itchy for that mouse button, bear with me just a little longer before we start clicking on programs. We now know the Sac needs two partitions to boot off the hard drive if we use HFS and only one partition if we use MFS.

How big should the partitions be? Glad you asked. It depends on how you answered the questions at the beginning of this article. Another way of asking the question would be, How much room on the hard disk are you willing to give up to the Magic Sac?

Here's how I answered these questions for myself. If I were to set up a Small Mac configuration, I would set aside three or four megabytes for the Magic Sac, and I would format it in MFS format. Why? Because three or four megabytes is small enough so that the Sac won't slow down due to massive file storage and large enough to be more useful than sticking with floppies. Secondly, the chance of creating files that have the same name is reduced compared to a huge (seven megabyte) partition.

If I were to create a full blown Mac setup, I would first create one partition that is one megabyte in size and a second that is seven megabytes in size. Then format the small partition in MFS format and

the large in HFS format. The Sac would boot off the small partition which contains System, Finder and Hard Disk 20 (all three located in System Folder) then continue reading from the large partition which only contains System and Finder (no Hard Disk 20 here). If Hard Disk 20 were on the large partition, it would be loaded again and start looking for something else to boot. Notice that after Hard Disk 20 loads, it asks for the current disk (or partition) to be ejected, then wants a disk (or partition) that is in HFS (or MFS) format to be inserted. You will not see this effect if you boot off the hard disk, but you will if you boot from a floppy disk. OK. READY?

Small Mac Setup

- 1-Create a partition that is 3-4 megabytes in size and contains no files (up to 5 megabytes is allowed).
- 2-Run the program called MAGICHD.PRG that came with your Magic Sac. It's on the disk that contains the startup programs for the Magic Sac.
- 3-Click OK, then highlight the partition that you want to dedicate to the Mac. I always use the last partition (E,F so forth).
- 4-Click OK, then click on MFS format, then click OK. The hard disk will spin a while.
- 5-Now you have a Magic MFS formatted partition on your hard disk.
- 6-Notice that you can no longer access this partition from the ST desktop.
- 7-Now boot your Magic Sac in the normal way with the hard disk option enabled (in the Magic Sac software). Do not enable the boot off hard disk option.
- 8-Press the key combination SHIFT-F3.
- 9–See another disk icon show up on the Mac desktop?
- 10-Now copy the System Folder that contains the System/Finder combination you prefer onto the hard disk (do not copy Hard Disk 20 to the hard disk).

- 11-Shut down the system (SHIFT-F3 to eject hard disk partition).
- 12-Reboot the ST and run the startup program for the Magic Sac.
- 13-Click on the options indicating hard disk present and boot off hard disk.
- 14-Click on the Data Pacific icon and away you go!

Full Blown Mac Setup

- 1-Create two partitions on your hard disk. Make the first partition one megabyte in size; the second, seven megabytes.
- 2-Run the MAGICHD.PRG program that came with your Magic Sac.
- 3-Click OK, then click on the two partitions that you wish to dedicate to the Mac. Highlight both of them.
- 4-Click OK, then for the one megabyte partition just created, format it in MFS format. For the seven megabyte partition just created, format it in HFS format.
- 5-You now have two partitions dedicated to the Magic Sac. One in MFS format and the second in

HFS format.

- 6-Boot your Magic Sac in the normal way, except select hard disk enabled option. (do not have Hard Disk 20 on this disk)
- 7-Press SHIFT-F3. You now have access to the 1 megabyte hard disk partition.
- 8-Copy the System Folder from your boot disk onto that partition (do not put Hard Disk 20 in the hard disk yet!).
- 9-Now copy Hard Disk 20 into the System Folder on your normal Mac boot disk (not on your hard disk!).
- 10-Now shut everything down (SHIFT-F3 to eject hard disk partition).
- 11-Reboot the ST. Then reboot the Magic Sac, but this time click on the option in the startup screen called "hard disk enabled". Also click on Atari hard disk installed if your hard disk is an Atari.
- 12-Now start the Magic Sac.
- 13-Your boot floppy should have loaded System and Finder, then Hard Disk 20 is loaded, then you

- should be prompted to eject the floppy. Eject it!
- 14-Now your small 1 megabyte MFS partition is being accessed and when the desktop appears you should see the Magic MFS hard disk icon as the startup disk.
- 15-Hard Disk 20 was loaded, so now you can access the HFS formatted partition. Press SHIFT-F4.
- 16-Copy the System Folder from MFS partition to the HFS partition.
- 17-Copy Hard Disk 20 from your floppy into the System Folder on the MFS partition only, not the HFS partition.
- 18-Shut everything down (SHIFT-F3 to eject MFS partition, SHIFT-F4 to eject HFS partition).
- 19-Reboot your ST. Reboot your Magic Sac, but now click on the "boot from hard disk" selector. Click on save configuration.
- 20-Exit program.
- 21-Double click on JUSTGO.PRG, and off you go!

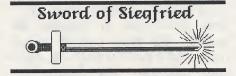
New Disks for June by Jeff Greenblatt

This month, Current Notes is releasing five new PD and Shareware Spectre compatible (128K ROMs) library disks. For those of you using the Spectre with 64K ROMs, I recommend the excellent CN Magic library listed elsewhere. If you like and use any of the files, don't forget to make your shareware donation(s) to the author(s). Here is a rundown of what each of the new disks contains:

Disk S22: Sword of Siegfried, a graphics/text adventure which was created with WorldBuilder (must be used with ver 1.9 of Spectre with the sound turned on).

Disk S23, Sounds #2, contains 17 sound resource files and a demo version of Mac CD 1.00. The

sound resource files may be used with SoundMaster (on CN Disk #S17) or MacCD. The sound files are 10,000 Marbles, Any Sound 1, Any Sound 2, Bad Disk 1, Bad Disk



2, Beep, Beep Sound 1, Disk Sounds 1–4, Don't Worry Be Happy, Ka-Chung!, Rolling Your Own, Type Key 1, Type Return 1, and Type Space 1.

Disk S24, Games #4, contains four new games: Dragon 2, Zoony, MazerLazer, and a fully

working Demo version of Shuffle-Puck.

Disk S25D, full featured demo version of MacMoney, a personal finance program that even writes checks. Does not save, but it does print.

Disk S26, FKEYS #1, contains 23 fkeys and fkey related applications. They are Anolog Clock, Clock, CopyDisk 3.0, Craps, F–KEY Installer, FadeKey, FileInfo, fkey, Fkey File Installer, Fkey–DA Sampler 2, FkeyView 2.5, FullMoon Calender, InfoKey, LaunchKey, MacAlmanac, Pipeline, ResViewer 4.5, SafeLaunch 2.2, SpaceWarp, StripTease, Unpack, Version Reader 3.0, and Windows.

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by Steve Marshall

I make my living as a computer graphics artist, an occupation once quite exotic but one that increasingly is becoming more common. I am assuming that at least some of my readers are artists themselves and interested in learning about some of the opportunities in the computer graphics field. Whether you are looking for a full-time career or just some free-lance work, there is a definite demand for the talented computer artist. Let's start with a look at how far computer graphics have come in just the past few years.

The Growth of Computer Graphics

The computer graphics field is still in its infancy, but growing by leaps and bounds. When I entered the field some 6 years ago, real opportunities in computer graphics were few and far between, limited to the major television networks or Hollywood production companies. Equipment to produce computer graphics cost hundreds of thousands of dollars and required teams of artists, technicians and programmers.

Fortunately, times have changed and the capabilities of personal computers have improved drastically. The Atari ST sitting on your desk has the equivalent power of a mainframe of just a decade ago. Just as the hardware and computing power of the personal computers has developed, software has also kept pace with the new technology, resulting in easy to use yet extremely powerful programs to create and manipulate images for a wide variety of purposes.

Opportunities in Computer Graphics

But while computer graphic capabilities have increased tremendously, the cost of producing those graphics has actually plummeted, enabling many more companies to make use of this sophisticated new imaging technology. And uses for these computers has resulted in the birth of whole new industries such as desktop publishing, desktop video and many more. With the advent of these new industries has come a demand for computer graphic artists and designers.

Good News and Bad News

At this point I have some good news and some bad news. The bad news is that, with few exceptions. the Macintosh and the IBM dominate the low-end computer graphics market, particularly where it involves the desktop publishing industry. Macintosh is solidly entrenched in that area while the IBM compatibles, just on the strength of their sheer numbers, are challenging Apple in an area it practically invented. The idea of an IBM as a graphic computer used to be ludicrous but with the new VGA standard, it's becoming a real force.

The good news is that your experience in mastering Degas Elite or Easy Draw on the ST will not be wasted effort since MacPaint and MacDraw or comparable graphics programs on the IBM all operate very similarly. If you can create realistic drawings using a mouse, going from the Atari ST to a Mac or IBM will be pretty effortless. It is even quite simple to produce finished graphics on the ST and port the files to either the Mac or IBM formats. Touch-Up, a new high resolution graphics program from Migraph, allows you to load Degas high resolution graphics and save them out in either Macpaint format or PC Paintbrush and TIFF format

for the IBM. This allows you to create all of your black and white graphics for desktop publishing on your familiar ST, then transfer the files to the appropriate format. Of course, you'll need some way of transferring the files to the actual Mac or IBM disks (this is where PC Ditto and Spectre 128 come in). This set—up could allow you to produce free—lance graphics for any number of clients regardless of their computer formats.

Now that we've discussed how to overcome the obstacles of differing computer systems, let's tackle some of the specifics of actually getting started in commercial computer graphics. This is a big topic so this month we'll concentrate on the various opportunities available in the publishing industry.

Computers & Publishing

As you know, computers are revolutionizing publishing. From large international corporations to small town companies, businesses are discovering the tremendous advantages of doing their own publishing. First and foremost is the cost savings. Doing everything from page layout and typesetting to finished color separations and printing, the modern desktop publishing system can pay for itself in a matter of months, with the additional advantages of creative control, faster turn-around and increased productivity. Before the advent of computers, all of this was done by hand, by artists designing page layouts, setting type, creating illustrations and pasting up entire publications using just paper and glue. (All of this has not been lost on the printing companies and they, too, have begun incorporating computer technology to remain competitive).

After a company buys its first computers (usually for word pro-

cessing and data management), its almost inevitable that it will evolve into some kind of publishing system. With the initial investment already made, it doesn't take much more capital investment to have full desktop publishing capabilities. Most companies relegate this responsibility to an enterprising secretary or administrator. Rarely does that person have any commercial art experience or drawing ability. If you're catching on to this, you'll see that many of these companies that have gotten into desktop publishing have little expertise and usually have a need for at least some part-

time artistic help. The great thing about desktop publishing is that the investment is so small in terms of money and staff that virtually any company can afford it. This means that no market is too small for an enterprising computer artist. While New York L.A. offer thousands of

possible jobs, opportunities exist in practically every town and city.

I don't want to suggest that just because you have an ST and DEGAS that you will make big money selling your artwork. Success in the commercial art field, computer or otherwise, is still determined by talent. What I am suggesting is that there is a tremendous market developing for talented artists who are comfortable with computers and who can handle a mouse. Many traditional artists can't (or won't) make the transition to computers, a void that is just waiting to be filled by people like you. Another factor is that, for the most part, computer graphics for desktop publishing tends to be a more technical type of line illustration. While a personal style is important, generally

a strong design sense and realistic handling of subject matter is preferred. A look at some of the clip art available will give you an idea of both the style and the quality you must compete with.

Getting Started

So where do you start? First, find out what businesses in your area have some kind of publication or publishing department. Or check with some of the commercial printers, especially the "quick copy" places who tend to use computers for some of their typesetting and layout. Get known in your area.

ers, especially the "quick copy" departments. A surprise), the g gone with the N who works in the

Publish some of your graphics in your local Atari user group newsletter or school newspaper, create an attractive flyer and circulate it to print shops, small businesses, etc. Advertise your services in the local paper and on bulletin boards. Finally, be patient. Building a market for your services may take time but eventually people will know that when they need some specialized graphics, you're available.

If you're looking for a full-time career in computer graphics, there are a lot of different areas to pursue; technical drafting (CAD), computer illustration (black and white for desktop publishing, color for commercial illustration and video applications), computer animation, advertising, television, magazine and newspaper publishing, even

software design. Some of these can utilize the ST, others require dedicated graphic workstations or specialized computers. Since we've been talking about desktop publishing, let's continue into the realm of big-time publishing—namely, newspapers and magazines.

Newspapers and Magazines

Most of the larger metropolitan newspapers have incorporated computers into their art and design departments. And (to no one's surprise), the great majority have gone with the Macintosh. A friend who works in the art department of

the Phoenix Gazette told me that they began integrating Macs about three years ago and these now account for about 75% of the artwork created for the paper. Artists use them for creating charts and graphs for the financial section, illustrations for the food section, and hundreds of other

uses. The computer is fast, changes can be made quickly, and the graphics can be electronically integrated with the text prepared by the writers. A look at any issue of USA Today will reveal the touch of the Mac—a color Mac is used to prepare the famous weather map and virtually all of the little illustrations that highlight every issue. Even TIME and US News & World Report utilize computer graphics (most likely done on a Mac) for many of the charts that illustrate the business and stock market reports.

There are two points to make here; that the Mac is well entrenched in the publishing world so get used to working with one if you plan on pursuing that arena, and that there are many opportunities in the publishing industry for computer

graphics. If your goal is a full-time job in computer graphics, your local newspaper would be a good place to start. (You might ask if they subscribe to Gannett's "Editor & Publisher" newsletter. This weekly publication frequently lists job openings for computer artists in the publishing industry.)

Advertising

Advertising is another industry that has been greatly affected by the computer graphics revolution. Many agencies use the computer (again, mostly Macs although the Amiga has made some inroads here) for designing everything from ad layouts and package design to storyboarding commercial productions. The computer allows changes and "what-ifs" to be visualized far more quickly than traditional techniques. Clients love the ability to see the effects of color changes and different type styles right before their eyes and artists appreciate the flexibility that computers offer. Again, advertising is another avenue for computer artists to explore.

Just Another Tool

One last point to make--a computer is just another tool for the artist. It will not replace the artist and it will not transform a poor artist into a great one. While the computer can make an artist's work easier and allow for greater creativity, it cannot replace the need for a fundamental understanding of basic design concepts, color theory or composition. In other words, even if you discover that you have a natural talent for drawing on the computer, you should still pursue traditional art and design classes if a professional career interests you. The computer is just another medium and still requires you, the artist, to bring those pixels to life.

I suppose this will seem like a strange article to be appearing in an Atari magazine, since I seem to have downplayed the ST's role in computer graphics. But, even though I prefer my ST to every other computer, reality dictates that I know and work with the Macintosh, IBM and Amiga if I want to be successful. It's just the facts of life.

Next month we'll take a look at computer animation and the desktop video boom, two fields that are also exploding with opportunities right now..



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ST TOOLBOX • J. Andrzej Wrotniak

Raising Your Computer Literacy

One of the most important tools for a computer user is a dictionary of computer terminology. For a long time I was planning to write one for *Current Notes*, but more urgent things were always detracting me from this noble task. Recently, however, I found some information that deserves to be shared with our Readers.

What follows is based on *Taking a Second Glance* at *Computer Terminology*, an article published in *Government Computer News. GCN* obtained it from the newsletter of the Government Environmental Protection Agency, which, in turn, found a copy somewhere in New Hampshire—the author or authors remain unknown (maybe under the FBI witness protection program?). I have only made the selection and added some comments to groups of entries.

Not willing to antagonize any software publishers from the Atari ST world, I have to state explicitly, that any similarities to any products on the Atari software market are due to a coincidence.

Computer Terminology

As we know, software is a live thing: it changes during all its lifetime. All those versions, updates and upgrades may be quite confusing, so here is a little list which will allow you to translate the professional terminology of software vendors into plain English:

Alpha Test Version: Too buggy to be released to the paying public.

Beta Test Version: Still too buggy to be released.
Release Version: Alternate pronunciation of "beta test version."

Version 1.0: Buggier than Maine in June; eats data.

Version 1.1: Eats data only occasionally; upgrade is free, to avoid litigation by disgruntled users of Ver. 1.0.

Version 2.0: The version originally planned as the first release, except for a couple of data-eating bugs that just won't seem to go away; no free upgrades or the company would go bankrupt.

Version 3.0: The revision in the works when the company goes bankrupt.

Some other terms are often used in the advertising literature, and this section of our dictionary will help us in sorting things out:

Upgraded: Didn't work the first time.

User Friendly: Supplied with a full-color manual.

Very User Friendly: Supplied with a disk and audio tape so the user need not bother with the full-color manual.

Warranty: Disclaimer.

Support: The mailing of advertising literature to customers who have returned a registration card.

Software publishers may select for targeting different

sections of the potential market. If you are not sure, whether the program is proper for your skill level, do not give up. The two user categories addressed most frequently in the software ads are defined below.

Advanced User: A person who has managed to remove a computer from its packaging materials.

Power User: A person who has mastered the brightness and contrast controls on any computer's monitor.

I think our Readers may also benefit from some of the more general computer terminology.

Spreadsheet: A program that gives the user quick and easy access to a wide variety of highly detailed reports based on highly inaccurate assumptions.

Integrated Software: A single product that deftly performs hundreds of functions the user never needs and awkwardly performs the half-dozen he uses constantly.

Encryption: A powerful algorithmic encoding technique employed in the creation of computer manuals.

Copy Protection: A clever method of preventing incompetent pirates from stealing software and legitimate customers from using it.

Multitasking: A clever method of simultaneously slowing down a multitude of computer programs that insisted on running too fast.

Network: An electronic means of allowing more than one person at a time to corrupt, trash or otherwise cause permanent damage to useful information.

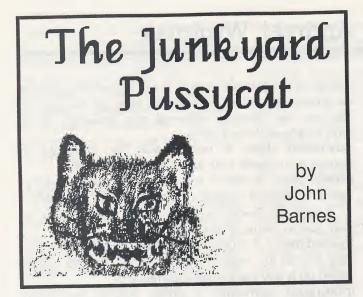
Printer: An electromechanical paper-shredding device.

Updates, updates...

Some of my articles of the last few *CN* issues may need small updates or corrections.

Gribnif Software is out with Version 2.03 of *NeoDesk* (send in \$3 and the original disk). There is something really strange with these guys: their program worked fine from Version 1.0 and upgrades really do have new nifty features; this is against the rules of the industry and they may expect to be sued by some of the large software houses for setting harmful precedents. Version 2.03 allows you to use a wide variety of customized icons (e.g. one kind for *.DOC files, a different one for *.BAS, etc.). Very nice.

In my review of the *Prospero C* compiler I mistakenly stated that all Prospero languages are available also for the PC-compatibles. This is true only about *Pascal* and *FORTRAN*, there is no *Prospero C* for PC DOS (some people wanted to order one after seeing my copy on the Atari ST!). Also, Prospero announced availability of *.TTP versions of their *Pascal* and *FOR-TRAN* compilers and linker, so that if you prefer to run their languages from a DOS- or Unix-like shell, it can now be done.



Atari Users Unite!

The Junkyard Pussycat is something of a nocturnal animal. In his prowling around in the nether worlds of the Atari domain the Junkyard Pussycat has found that the voice of the Atari user is too often lost in the din, like the signals from nighttime radio. Too many talk shows, messages beaming in from all over the land, stations fading in and out.

The DECUS Model

We Atari Users need to unite and send out a strong, focussed, coherent signal, like a laser beam. Lest you believe that this is a pipe dream, let me point out that this model has worked successfully for one of the world's largest computer manufacturers, namely Digital Equipment Corporation. No one can deny that DEC is a strong company with strong product lines. It got this way, at least in part, by harnessing the creative energies of its users through DECUS, the Digital Equipment Corporation Users' Society.

While there are a number of instances where the DECUS model does not apply to the Atari world we should at least try to use some parts of it to make life better for ourselves and for Atari Corporation. After all, Atari Corporation and its body of users cannot live without one another. Biologists call such relationships "symbiotic." If one member of a symbiotic pair tries to withhold sustenance from the other, it does so at its own peril. It is about time for both members of the Atari-user pair to recognize their dilemma and make some attempt to resolve it harmoniously.

In the absence of a strong initiative from Atari Corporation along these lines the users will have to take the lead. We should band together to form a national users group with a paid executive secretary and a central office location. The group should be a noncommercial not-for-profit entity dedicated to promoting knowledge and understanding in the use of Atari

computers and related products. The group should be under the control of its members, who would elect officers and set priorities. Like DECUS, the great bulk of the work would be done by volunteers.

I suspect that Atari Corporation would not be offended by this at all. They might be glad to get the problems of user group communications into the hands of a group with some continuity and some responsibility for its own destiny.

The best acronym or the organization that I can think of is ACUTE, for Atari Computer Users' Technical Exchange, but we could surely hold a contest to find a better one.

Services

ACUTE, like DECUS, could hold symposia and training seminars. These could be low-key affairs designed for education and technical interchange.

Perhaps ACUTE could take on the role of coordinating user group and commercial interests in the holding of regional and national Atari exhibitions, which would feature a much stronger technical and educational component. Atari Corp would find it easier to coordinate its participation if it could commit to a suitable number of shows well ahead of time. Personality clashes between user group leaders have cost shows in some promising venues and there is no real reason to have two shows in Detroit within 2 months of one another.

ACUTE could coordinate on-line information exchanges and filter the content of these things into a coherent form. Transcripts of teleconferences and summaries of technical information could then be published. Special Interest Groups (SIGs) devoted to particular areas would be a natural outgrowth of this activity.

ACUTE could perhaps act as a clearinghouse or as a publisher for distributing software that is in the grey area between public domain and commercial. This is a role that DECUS performs very successfully. Quality control and evaluation of pd software would fill a vital need. Royalties for software authors might be arranged.

There is a lot of material floating around that could be gathered into books and published. A sourcebook of all Atari-related material like the one published by Microware Systems for OS-9 would be a worthwhile project to start off with. The publication activities should not overlap those of the commercial Atari press and there should be no advertising. The theme should be "users helping users" and the focus should be on problem solving rather than hype or flaming.

Standards activities are an important area where user input is needed. Languages, operating systems, and application programs require a certain amount of discipline in their development, implementation, and application. ACUTE could coordinate the participation of its members in standards activities and publish reports of significant developments.

A coordinated bug list that everyone could agree on would be a valuable service. ACUTE could arbitrate disputes between developers and users in this area. In some cases it might be necessary to designate a team to reproduce and document these so that the developer could be convinced that a fix is needed and worthwhile. Perhaps ACUTE could set up panels of experts and become a sort of Consumer Reports on these matters. Users are confronted with too much software that is not really ready for prime time. A central list of software versions and update availability would be a service well worth an ACUTE member's dues.

Ethics issues are important and ACUTE would expect its members to adhere to a code that would discourage piracy and enhance responsibility among, for example, beta testers. Software developers might find it advantageous to use a stable, high-quality pool of people with certified credentials in beta testing. I have never seen pirated software within DECUS.

Communications with Atari Corp. would be greatly enhanced because inputs through ACUTE would have high credibility. Such recommendations would reflect genuine consensus and technical problems would have been studied systematically and professionally.

The existing user groups could benefit because they would have much more leverage with ACUTE than with Atari. Speakers' bureaus, organizational guidelines, leadership training and development, and a coordinated national activity schedule would be services that could be offered to user groups. Educational tapes and programs would be a very marketable item.

Some sort of mechanism could be worked out for a good public domain software catalog with quality-controlled offerings. Shareware authors might accept royalty payments in lieu of the inflated prices they are trying (and largely failing) to collect now. A good catalog of public domain titles and abstracts is a service that user groups might subscribe to.

Revenues

At the outset, ACUTE's revenues would probably have to come from dues. Individuals could join at a low price, commercial interests could join at a somewhat higher price. User groups would also be expected to pay a fee to retain their affiliation, particularly if arrangements can be made for royalty payments on software distribution.

Fees could be charged for access to online forums and databases. In order for this material to become an attractive alternative to that which is already out there it will have to be of high quality.

Registration fees from symposia and training seminars could become another source of funds. Perhaps the profits from exhibitions could be channeled back into the cause. Further down the road sales of software and publications might grow to the point where the dues can be kept low. Charging dues is a good way to

make sure your mailing list is up to date. DECUS does not charge dues, but it does perform regular member–ship audits.

Taken one by one the services described above will not make anybody rich. Someone else would have already offered these services if they thought they could make money on it. User groups and individuals have, however, done these things on a small scale time and time again. Collecting all of these efforts, improving on them, and making them widely available would be a good role for ACUTE.

The Current Situation

But, one might say, "don't our current user groups, dealers, developers, and Atari Corporation provide these things already?" Hardly. Each component of this mix has built—in biases and limitations that prevent effective communication.

Atari Corporation is, rightly, preoccupied with promotion and marketing. They need to get their machines onto dealer shelves. As a small corporation they cannot afford to devote resources to something that may not show up on the bottom line for years. Their limited technical resources need to be focussed on the real issues, not on minor brushfires.

The user community has never had a consistent voice within Atari. The liaison personnel move on to better things after a few months or a year. Most of them have additional responsibilities. Atari people are too harried to dig out answers for the technical questions that come up. Developers are too busy trying to put bread on the table to sit down and have serious technical interchange with users.

User groups have their own agendas. Their autonomy is more precious than anything else and they have wisely avoided becoming arms of the corporations. The level of continuity and sophistication of leadership in local user groups leaves a lot to be desired. New officers have to be frained every year. Technical knowledge and competence are sparse.

User group coalitions lead a tenuous existence because they are too dependent on a few key personnel. Volunteer work outside one's circle of immediate friends is exhausting to the point where the typical worker lasts only about five years.

"Serious" developers find the Atari market too small to be interesting. These folks are lured by the golden glow of the millions of MS-DOS machines in offices, factories, and laboratories—organizations that tend to at least pay lip service to the idea of proper ownership and registration.

The journalists of the Atari press are busy pursuing today's news. Yesterday's news is no longer interesting. Publishers know that bad software reviews drive advertisers away. Tough judgments alienate sources. This leads to a very Pollyanna-ish spin on the information that they do transmit to us.

Store owners don't really care whether a product is any good. They just want to be able to say "here is a Wonderful New Product."

The global electronic town meetings have their message bases cluttered up with incoherent ramblings. Sifting nuggets of useful information from that reminds me of hydraulic mining for gold. Thousand of tons of water and sand for a few ounces of glitter.

As part of the world marketplace the Atari community has to suffer the wrongs of shortsighted, quick kill, bottom-line oriented merchandising just like everyone else does.

The User's Stake

The likely recruit for ACUTE is a person who has several thousand dollars tied up in equipment and software. He has problems to solve in the here and now. His SLM804 won't handle *Word Perfect*, let alone all of his other software that looks for an Epson printer. He doesn't have the fonts and functions he needs in *Publisher ST*. His hard disk does funny things on alternate Tuesdays. This person is just your typical everyday Atari User.

He has a lot at stake. His small business may be at stake. The user's sanity is certainly at stake. The precious moments that he is able to put into his work with the computer should be made much more productive and rewarding.

The precious dollars that are available for software and hardware purchases must be spent intelligently, with decisions based on good information rather than promotional hype.

If no one else looks out for the user, the user must look out for himself. A lot of the flaming seen on the bulletin boards is simply a response of "I'm mad as hell and I won't take it anymore" to some shortcoming or slight that has victimized the user.

This user, then, is the key player as far as ACUTE is concerned. Developers, user groups, even Atari Corporation would want to lend their support to ACUTE because ACUTE would talk to real, responsible users who have demonstrated their commitment by paying dues

There are lots of users out there who spend good money for information and access. Publications like ST Informer and Current Notes bear eloquent witness to that. As commercial undertakings, however, they can hardly claim to be advocates for the user community.

Making It Happen

In order for ACUTE to get off the ground we need several things: 1) the right person to serve as the organizer, 2) a commitment from Atari Corp, 3) commitment from users, and 4) patience.

The organizer might be someone who has a modest income in his retirement but who could use a modest supplement to compensate for the grief and an

expense account for some travelling and telephoning. The organizer would need credibility. Solid technical knowledge, a flair for intelligence gathering, lots of promotional ability, and infinite patience are the only prerequisites. A cross between Steve Jobs, the late Allen Dulles, Lee lacocca, Peter Ueberroth, and Mahatma Ghandi would be real good.

The office should be located a town or two away from Sunnyvale so that the executive director would not have to attend meetings at Atari every day. However, it should be close enough so that Atari people can be ferreted out in their lairs.

Atari Corp must recognize that their users are worth some after sale support. Atari users are, after all, the biggest purchasers of Atari products. These people need some expectation of new hardware and software that will help them do the things they see the MS-DOS and Mac users doing every day. Communicating with these people should easily be worth something like a hundred thousand dollars a year. This money could be very effectively spent as seed money for ACUTE to pay a few salaries, rent, and some basic expenses. Atari should also turn over some files (like the list of user groups and dealers), hire or reassign a liaison person with no other responsibilities, and then stand back.

Such steps would be long steps indeed for Atari Corporation. But the DECUS model is there to show that it can be successful.

The benefits in terms of good will and sound technical input should prove to be worth many times a modest initial investment. DECUS has been a selling point for DEC for a long time now and DEC devotes about 30 staff members to working with DECUS.

Users themselves must learn that they have to contribute rather than simply consume. Their input has to be focussed and clear. They should take some time to find out why they are having problems, and they should be willing to make some contribution to their solution. We need people who have invested some learning time to teach others.

I didn't find the World User Network idea that surfaced a few years ago to be a very attractive notion at the time, and it died before it could be sold effectively and because its volunteeers failed to deliver.

During the intervening time the structure of the Atari world has become much clearer. Several different people have passed through the user coordinator's chair at Atari. The pattern behind Atari Corp's introduction of new products and updates to old ones has become clearer.

I'm sure that we could find space in a telephone booth for an organizational meeting in conjunction with the WAACE AtariFest on October 7 and 8.

Meanwhile, look me up in Category 11 on the ST Roundtable on GENie. I'll see you there if the Topic Police don't get to me first.



The Action Adventure:

Leisure Suit Larry Goes Looking For Love

(In Several Wrong Places)

Possibly the most popular of all the action adventures is Sierra's self-proclaimed 3-D Animated Adventure games. Defined as "interactive movie(s) where you become the main character," each game has steadily improved technically, making the games all the more fun to play.

Or watch, really. In the sequel to Leisure Suit Larry In the Land of the Lounge Lizards, Leisure Suit Larry Goes Looking For Love (In Several Wrong Places) (\$49.95, Atari ST, three double-sided disks) relies heavily upon animation sequences. While always cute and funny, they're basically cartoons you have no control over (you'll begin longing for mazes once you find yourself sitting through the jungle sequence for the umpteenth time). It would be much more enjoyable telling Larry what to do and watching him enact those commands rather than watching him do everything on his own. Although the above-average graphics and original score almost compensate for the repetitiveness, too much of a good thing can make one's bladder burst (as Larry will soon find out).

LSL2 picks up where LSL1 left off with poor Larry having been dumped by Eve, the one-time girl of his dreams, and dumped on by Eve's dog. Determined to better himself, Larry sets out to find true love, one consisting of a meaningful relationship. But will he be able to resist temptations until then? Will he even be offered temptations?

Instead of trivia questions in LSL1, LSL2's copy protection is to have you match a woman's face on the screen with one in your little black book and enter the last four digits of her phone number. Study the faces carefully; they tend to look alike in black and white. Matching the dress, hair, and jewelry should do it. If you're still stuck or don't have the documentation handy, lay your odds on 3425: of the 16 women, two have the same phone number (roommates, perhaps?).

Be sure to have several formatted disks handy to save often. Vital clues usually pop up after you die, revealing a solution to a puzzle. In fact, it almost becomes a necessity to save a game, try something daring that may result in your death, and then restore the game. What you learn in the afterlife you'd never have guessed if you hadn't previously died.

Too, my version (1.001.006) crashed at the most inopportune of moments (either back to the desktop or a "bad function" error and three bombs). Save, save, save!

The following hints assume you're stuck at some point and have already gone through the walk-thru at the end of the documentation. They don't necessarily include every possible solution.

CHARACTERS

After saving a game, talk to the people as much as possible. It doesn't have to be elaborate conversation; a simple "TALK TO xxx" will suffice. You'll learn a lot from them. They may also have some information if shown things.

Anaconda: Using something you just found may be of help.

Barbara's Mother: What she can do to you.... It's her empty cabin that's more of interest.

Barbers: They don't all look alike, do they?

Bees: Underneath their killer instinct, they can't be that bad.

Captain: Be careful not to disturb him or he—and you —may end up more famous than Valdez.

Chief Keneewauwau (or Kenawauwau): Please him and you get the woman of your dreams!

Eve: Forget it, Larry. She's old news.

Guard: Would you be able to stare at X-rays all day without catching a few winks? With this terrorist scare, however, you may want to help him out a bit.

Jogger: She can be ogled in the somewhat questionable and seedy section 4.

Kalalau: A vision of beauty, no?

Ken: Talkative fellow, isn't he? If you find him bother—some you may be able to redirect his interest in something or someone else.

KGB Agents: They're all around, especially now that you unknowingly have what they want. Exercise caution in approaching or being seen by them. Then again, you're not supposed to know anything about them, so forget this clue.

Maid: Girls like that have strong-armed brothers, Larry.

Maitre D': Take it outside, take it outside. Wait at the bar, wait at the bar. Waiting seems longer than being lost in the jungle!

Piranhas: They'll have a lasting effect on you that won't cause you to jump for joy.

Woodchopper: Try standing right next to him.

LOCATIONS

Bathroom (Airplane): Lots of people must have eaten the pate special. Or they didn't feel like standing in line at the ticket counter. You're in no dire emergency, though.

Bridge: I wonder what this switch does... **Chasm**: If only one of the vines was loose.

Cliff (Resort Island): Although you can come very close to falling off at various points (and even closer as the cliff narrows), you never will.

Elevator: It'll open with an underground disturbance. Created any volcano quakes lately?

Glacier: When it's icy, think of what roads are paved with while you're inside next to a cozy fire.

Jungle: Welcome! Larry will always find a way out...eventually.

KROD Studios: You have a winning ticket! But who's to know your numbers don't match exactly? After your fifteen minutes of fame, shop around for what you'll need on the cruise.

Music Shop: Good luck. The last thing it'll do is open up.

Quicksand: Did you notice the monkey dart off as you appeared? He may know something you don't. Slowly make your way over to it.

Quikie Mart: Once you get the Grotesque Gulp you won't be able to let go of it, even if you can't afford it.

Restaurant: It's a jungle out there. The Rich and Famous of the world will always be given seniority. At least the buffet's not crowded.

Swabs Drugs: Examine everything, moving around the store as you do.

Swimming Pool: Dive into the pool and impress the...er, quys? But boy, is that sun awfully hot.

Volcano: With those three objects, what would Mac-Gyver do in a situation like this? **OBJECTS**

Bikini Bottom: Don't you feel naked without it?

Bikini Top: Ever stuff a wild and wet one? Certainly makes you look more...mature.

Flower: Make love not war.

Gum: Sugarless bubble's best for those long, ear-clogged plane trips.

Lifeboat: Hop to it; you haven't much time left.

Old News: It should be taken out with the rest of the trash.

Parachute: It's a good thing you have some insurance against the plane crashing.

Passport: It's probably been misplaced, along with the old newspapers.

Pate Special: Mmmm-mmm good. As long as you don't eat it.

Suits: Where are you going to find \$1, much less \$1,500,000? Besides, your leisure suit is perfectly suitable.

Swimsuit: As much as it is, you won't find another bargain in Los Angeles. Keep in mind Larry's modesty.

Ticket: The line's eternal. Explore elsewhere.

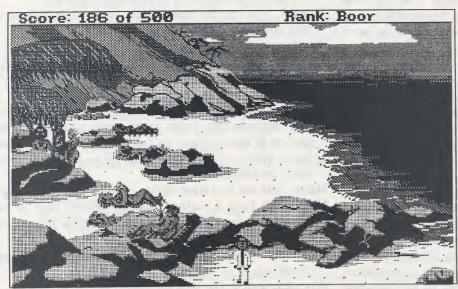
Vines: Swing them like an apeman!

THE PARSER

No doubt you'll be tripped up several times by the parser. At one point in the game I wasted hours trying to think of the correct wording. Keep in mind that simple verb-noun sentences are probably best. On several occasions, entering "USE (object)" will accomplish what a normal descriptive phrase will. Also, oddly enough, sometimes including the entire object description will work ("PET HAIRY ANIMAL") or using a synonym ("PET HAIRY MOOSE"). The parser does indeed make things difficult.

When you start to type something, game play is suspended. Thus, if the hungry moose rushes at you with a fork and steak knife, quickly pressing a key will pause the game giving you time to think of a final command before becoming moosefeed. Unfortunately, you can't tell if the game launches into autopilot or if it's expecting another command.

The precise time when a command can be typed is an irritating facet of the game. At a place when next to nothing is happening you'd think you'd be able to tell Larry to do something. However, you find out you can't. You'll find yourself dying when you know you could've prevented it if the animation sequence



Setting the fashion world ablaze, Larry Laffer visits the nude beach in Leisure Suit Larry Goes Looking For Love (In Several Wrong Places)

hadn't taken over. In this case, you should plan to do those things before the animation begins (who would've thought you could learn so much from dying?).

I found the arrow keys easiest to move Larry, with the keypad useful for diagonal movements. I kept the mouse pointer in the center of the screen so I knew whether it was loading a new screen (the first time a room is entered it's loaded off the disk; the second time, it's "loaded" from memory). The arrow changes to a palm sign when loading.

Set Larry to his fastest speed to speed up the game somewhat. The more animation on the screen, the slower he'll go, so it's best to keep him as fast as possible unless you're exceptionally patient. And since he's no longer looking for one night stands, he can be as fast as he wants, thank you.

SCORE

(Pointwise...get your mind out of the Scurvy Dog.) I ended up with a total of 497 points out of 500, still successfully solving the game. As there are a couple red herrings in the game that have no use but still yield extra points, you should be able to solve the game without a perfect score. Still, the goal of everything in adventures is to get as high a score as possible. In order to do so, get and look at everything. Please let me know if you obtain a perfect 500; my hair's becoming more and more like Larry's trying to figure out what I've missed.

TIME

The time element of LSL2 isn't too restricting unless you dawdle or leave the game for an extended period of time (you're safe when dialog boxes pop up; the game is then paused until you press RETURN). If you spend hours trying to pick up the Quikie Mart clerk, however, you could literally miss the boat...in both cases. Once on the cruise ship, if you spend too much time lying in the sun or swimming, you'll find a nasty surprise waiting to bowl you over in your cabin.

THE END

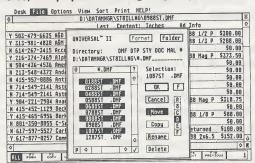
That's a wrap! The past four columns have dealt with what I view are the four genres of the adventure game: text, text and graphic, graphic-only, and action. In future columns we'll continually be coming back to these in one form or another.

Up next: Deja Vu // from Mindscape.

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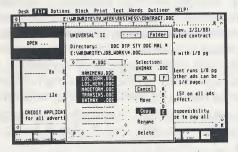
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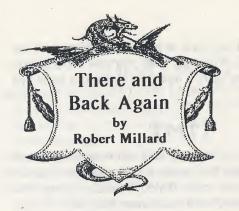


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A MURKY CRYSTAL BALL

"The future...seems to me no unified dream but a mince pie, long in the baking, never quite done."

—— E.B. White, from One Man's Meat.

It's doubtful the learned Mr. White ever used a word processor, much less played a computer game. None—theless, the aphorism above forced its way through the maze of my memory while preparing this month's column on future ST fantasy releases. There's some tasty stuff ahead, but it's all taking a long time to get here. I last did a column on upcoming CRPGs in our October 1988 issue; if you're wondering what happened to all those promised packages, here's an update on everything forthcoming in the ST fantasy world.

Demon's Winter will be the first game to materialize out of the miasmal future. It is a follow-up to Shard of Spring, once promised for the ST, but killed in development. Scorpia, the high priestess of fantasy journalism, gave Demon's Winter a fairly positive review, and the way she's been panning products the past year, that's practically a thumbs up. The game is basically an Ultima mimic with nothing particularly innovative about it, but its surface world is much larger than Shard of Spring's. Combat feels a lot like Wizard's Crown with less waiting between commands. Novotrade, a Hungarian company, converted it for SSI, and it should be on the shelves now.

Cinemaware is distributing several European games under the Software Spotlight label, among them a one character, first-person perspective CRPG called *Death-bringer*. The game looks like *Dungeonmaster* with a complete world: villages, castles, countryside, and dungeons. Those who played it as the Pandora game *Galdregon's Domain* gave it good marks for graphics and sound. Cinemaware claims it has made significant changes in the U.S. version, so it may be even better in its new guise. The game should appear at retail shortly behind *Demon's Winter*.

SSI's *Pool of Radiance* has sold over 150,000 units, easily making it their most successful fantasy effort to date. Contrary to rumors, it *will* be released for the ST – someday. The French company UBI Soft is handling the conversion, but they may have hired a subcontractor (U.S. Gold?). SSI also plans to release ST versions of

Doug (*Phantasie*) Wood's *Star Command*, and a world war three game called *Red Lightning*. Linda Blanchard of Strategic Simulations says that the company is definitely not giving up on the ST. Indeed, if these three come to be, that will make sixteen fantasy and strategy games SSI has released for the ST since 1986. Who has more?

Okay, let's get down to Everyman's Meat: the Dungeonmaster scenario. Chaos Strikes Back just might arrive on the heels of Demon's Winter and Deathbringer. Everybody realizes, I hope, that this is not Dungeonmaster II. You must have the original game to play it, you must have highly developed champions, there are no new monsters, there are fewer dungeon levels, and there are only two new objects. BUT - this is an expert-level scenario for advanced players. It will be completely unforgiving, and actually take longer to finish than the original game. FTL held a conference on GEnie about the new scenario, and afterwards, I was intimidated. Chaos Stikes Back sounds like what might have been had Sir-Tech slapped Knight of Diamonds and Return of Werdna together after releasing Wizardry I. FTL says it will be out in June, but their track record says otherwise.

I still get questions about solving *Dungeonmaster*, and more than a few complain about FTL's so-called hint book, Dungeon Mastery. A number of stuck gamers have purchased the book, and found it contained neither maps nor puzzle clues. Tracy (Dragonlance) Hickman's pseudo-monographic approach aside, the book is a rip off. FTL now sells a newer guide, the Dungeon Master Adventurer's Handbook, by mail for \$11.95. It is a thirty-nine page walkthrough with the stuff Dungeon Mastery should have included. Still, it has a number of errors, some nebulous puzzle solutions, and little information on special items. Sources tell me The Lost Scrolls of Mt. Anaias and Tony Severa's hint disk are both very good, but I've had quite enough of the walkthrough verification process for one game.

You may have already seen the European version of Origin's *Times of Lore* on retailers' shelves as early as April, but beware. It is very buggy, and scrolling is impossibly slow. Origin is play-testing it now for American release, and they've found that it needs a lot of work. Graphically, the game looks like *Gauntlet* meets *Ultima*, but it is an introductory-level CRPG. Questbusters, the adventurers' journal, just voted it the best action adventure of 1988, and seasoned gamers do

seem to like it, as lightweight quests go. As I predicted last year, *Ultima V* has been pushed back to a fall release. If you read the British magazines, though, you'd swear it will be out any day. The April issue of ST/Amiga Format displayed two pages of *Ultima V* screens, and it was clear that the reviewer played a complete version, beta or otherwise. Origin says it hasn't received anything from the developer, British Microprose. I hope they're not sitting on it, because *Warriors of Destiny* is a considerable leap in graphics quality for the Ultima series.

The worst news I have to relate this month could've been a lot worse. Electronic Arts has delayed the release of *Starflight* until Christmas. Dave Dempsey at EA feels confident the acclaimed sci-fi CRPG has passed the crucial TBD/TBK stage: To Be Determined or To Be Killed. Although a lot of work has gone into the project, Dave says he has seen games at EA with just as many man-hours invested get killed. So let's hope he's right, and *Starflight* doesn't get TBKayoed.

Sorry I mentioned it department: Last October, I wrote about Reeve Software's Adventure Con-struk-tor. It was to be what EA's Adventure Construction Set is to the Amiga, but we'll never see it. Alan Reeve said that he got too little response to his ads for the game. These were stark blurbs camouflaged within the back pages of Compute's Atari ST magazine, so I'm not surprised. But I am disappointed.

It's only in the planning stage, but Sierra is tinkering around with a fantasy game, tentatively called *Hero's Quest*. It will be typically Sierra, with puzzles and offbeat humor, but will also include monster combat. Of course, some say *Hero's Quest* already exists—it's called *Rings of Ziffin*. In my April review of Sierra's *King's Quest IV*, I stated that the game is only available on four double—sided disks. In actuality, Sierra will provide single—sided disks via mail. (Swapping around eight disks might not be fun, though.) Sierra also inadvertently left out the CZ—101 music driver, and that is available by mail, too.

Last year, I decided to claim *Wargame Construction Set* as my sleeper/discovery. Using *C.O.L.R. Object Editor* or *Doodle*, custom icons could be drawn, and therefore fantasy battle games were possible. I liked it a lot better than *Paladin*, if you read between the lines of my review. Robert Calfee, who converted and improved Roger Damon's eight—bit original, is now working on a fantasy wargame program that sounds promising. The map is four times larger than *WCS*, and maximum units per side is up from 32 to 256! It will be flexible enough to create historical battles, too. Bob welcomes any suggestions concerning the program. If you contact me on GEnie (R.MILLARD1), or write to Current Notes magazine, I'll see that he gets your comments.

Pc-ditto // is going to be THE topic in the Atari world for the next few months, perhaps as much for

gamers as for productivity users. The big question for us is EGA support. It is promised later this year as a free upgrade, but will we really get what we see on the back of MS-DOS game packages? In the meantime, here's an update on some IBM fantasy games when run with the original *pc-ditto*.

Runs well: BattleTech, Star Saga: One, Wizardry V, Star Command, The Magic Candle (a bit slow), and Wasteland (surprisingly good CGA graphics and an excellent game).

Runs too slowly: Pool of Radiance, Future Magic, and Starflight.

In early June, I'll be attending the Summer Consumer Electronics Show in Chicago. I don't expect to see much ST stuff, but I do hope to learn a great deal about where the fantasy role-playing genre is headed. Tune in next issue.

QUESTionnaire - The Trivia Contest

This month, you hard-core gamers have a chance to win SSI's new CRPG for the ST, *Demon's Winter*. Some of the following questions will prove if you've really beaten a game or not, and some might baffle even those who've completed a game. There are some great players out there, so in the likely event of two or more perfect entries, a drawing will be held. All entries must be received by June 30, 1989. Send your entry to Current Notes QUESTionnaire, 122 N. Johnson Road, Sterling, VA 22170. Answers and winner will appear next issue.

- 1. In The Bard's Tale, what magic is in the bardsword?
- 2. What does Minax say in Ultima I/?
- 3. In Sundog, one system can only be reached late in the game, after obtaining a special part. When entering that system, how is the hostile spacecraft there described on your console display?
- 4. What is the musical mistake heard on the title screen of Ultima IV ? (ST version only.)
- 5. In *Dungeonmaster*, the firestaff is altered at a certain point. What are its new powers?
- 6. How do you enter the Dosnebian Temple in *Phanta-sie 1*?
- 7. What is your title at the end of Roadwar 2000?
- 8. What are you given at the end of *Phantasie* //?
- 9. When answering a question wrong at the codex of *Ultima IV*, to where are you teleported?
- 10. When you meet Nikademus in *Phantasie III*, who else appears?



Around the end of summer, a new Atari machine (the TT) is going to debut. It'll have the GEM you've come to know (and love?), and it's going to offer UNIX as an option.

UNIX? you say. You've heard of it, but don't know much about it. Take my word on this: keep it that way if you can.

UNIX is a fine operating system (OS) in many ways. It is multitasking (lots of tasks happening at the same time) and multiuser (just plug in as many terminals as you like). And because UNIX is easy to move from machine to machine, it stands a good chance of becoming a dominant OS in the future.

However, it suffers from possibly the worst user interface ever invented. I could argue that its interface is worse than the first one I ever used—the toggle switches and lights on the front panel of an HP 2116 minicomputer. Generally, to talk to a UNIX machine, you type into a "command line." You've probably used those—it's where the machine gives you a "C>" prompt, and you type away. No windows or mouse. On the Atari, generally you run something like command.prg to get to a "command line"; you then have a thrilling, 80 x 24 screen, text only.

Command lines rely on you to type in, well, commands. On some machines these commands are relatively easy; MS-DOS uses DEL to delete, REN to rename, and so on.

UNIX commands are obscure, vague, and often nonsensical. And there are hundreds of them. Guess who gets to learn them if you want to use UNIX?

UNIX: Horror of the Future

By: Dave Small
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There's really no reason to saddle all this UNIX power and usefulness with a gawdawful command line. But it's happened. And to be sure, there are attempts being made to change that interface, specifically, to make it more windows and Macintosh like. (The UNIX window thing is called "X-windows," and is, shall we say, still being refined.)

But the truth is, for a long time yet, we're going to be stuck with the standard UNIX, windows or not. It's just like the ST--you can do a lot from GEM, but some things have to be done from a command line.

I've been masochistically subjecting myself to UNIX for awhile now, and am coming up for air to tell you about it. Remember, this is in the future for you, when that TT machine comes out.

Specialistese

One major problem with computers is that we can't talk to them in English. Heck, we can't even put it that clearly: computer people say, "We have no natural language interface." Translation: we can't talk to 'em in English.

Instead, we talk to them in a Special language, Specialistese, the language of Computer Specialists. It's like Doctorese, Prescriptionese, Engineerese, and so forth.

When the Average Soul turns on a machine, does he get a friendly "hello, how can I help you?" (Like a phone company operator?). Oh, no, he gets a "C>". The braver may type "HELP" and get back anything from "HELP???" to "No Such Command."

This "C>" atrocity is known as a "Command Line Interface." You gotta learn it to use the computer. Now, if you're part of the Specialist Clan, you can make the Command Line Interface jump and turn circles. You can DIR | SORT and get an

alphabetized directory. You can "copy c:\dave\unix* d:\articles\cn" to move all the files from this folder to your optical disk.

But you've paid a price. You're no longer speaking English. And you've spent a lot of time fiddling around, making mistakes, learning Specialistese.

Corporation "Management Information System" (MIS) types just love Specialistese. It gives them job security. Back in the horrid, dark days of mainframes, you could only talk to the computer through some dweeb (excuse me) who knew "JCL," among the most cryptic, bizarre languages known to man. If you, as boss, fired the dweeb for not answering your questions, your million dollar mainframe was useless.

The story of micros in the corporate world has been a rearguard action by MIS types defending their territory. No, you can't hook up that micro to my mainframe. We're standardizing on one horrid word processor throughout the company that You Must Use, with its own Specialistese language. Merely press control–K to move to the end of the document ... as the user sits there wondering what "control–K" means.

The epitome of this dark ages mentality has to be the IBM PC tied down into a mainframe computer. It speaks a language only specialists can understand, through links only network specialists can understand, and is hostile.

Macintosh and ST

Along came Macintosh. (And with it the ST). A first, stumbling effort towards a computer that could be used without a lot of Specialistese. The original dream was excellent. It's been corrupted along the way, however, by the usual group of Computer Specialists who seem to

infest computer manufacturers, so it isn't as good as it could be. The Mac had a lot of arcane stuff added to it. For instance, why on earth should there be a Font/DA Mover?

But it's still as friendly as machines get these days. I got my parents up and running on a Mac, able to do real things like write letters and draw pictures, in a couple of evenings.

The idea of a machine subservient to the user was a good one. The machine bent over backwards trying to make itself understandable to mere mortals. It even smiled at you when you put in a good disk, just to pat you on the back. It was *friendly*.

This offends the living daylights out of cold Specialistese types, who tend to manifest themselves in IBM ranks. They adopt a sort of masochist—macho attitude towards computers; if it ain't hard to understand and use, it ain't a computer. They're the sort of people who run back—hoes, drink Budweiser, and are in all the "Man to Man" commercials discussing Manly Problems.

They called the Mac a "toy" and "cute," words they also referred to Barbie dolls with. And, in a way, they were right; until it got a meg of memory and a hard disk, the Mac wasn't all that great. Go to the Mac II and it got truly powerful. The words "cute" and "toy" gradually faded away, about 1987–1988.

The Mac is really raising havoc these days. The Mac is slowly winning, to the absolute outrage of the Specialists. Briefly, management started learning about how many hours of training it required for people to learn about and use an IBM vs. a Mac. (My wife used to be with the Texas Instruments Educational Center, working on employee training, so this hits close to home).

On the Mac, people could be doing productive labor in a few hours, actually getting something done. On the IBM, they were just starting to confront the dreaded "C>", subdirectories, command line, and such at that point. Mac users

tended to make far less disastrous mistakes than IBM users, who would do things like type "format" to format a floppy disk—and end up reformatting their hard disk.

Add to this Desktop Publishing and the Laserwriter, and you had something really hot. And that's why Apple is busy shipping as many Mac SE's as they can make, and rolling in cash. They've got something easier to use. Not everyone is into this masochistic, macho computer way.

So along comes Atari.

Now it's no big secret that the Atari is a lot like the Mac with the way it talks to users. (Did you see I didn't call it a "userinterface"?) We have windows, a mouse, pull-down menus, and so forth. Oh, excuse me, we have drop-down menus, Mac has pull-down menus—there's legalese involved here. I wouldn't want to be saying the ST copied from the Mac!

(I will not discuss lawyers and computers. I will not discuss lawyers and computers. I will not discuss lawyers and computers.)

Problem is, the ST technology is aging. We're still an 8 mhz 68000 machine. Unless you've got your eyes stuck only on Atari things, you know the rest of the world has gone to either the Intel 386 or the Motorola 68030 chips, typically at 16–30 mhz.

This technology puts the ST about where your 8-bit Atari is now.

TT

And we come to the TT. This is Atari's 68030 machine. It's going to be offered with TOS, our good old windowing-mouse scheme, and optionally with something called UNIX.

Well, TOS I can handle. It ain't great, it ain't bad. It seems to be something that beginners can deal with, and that's fine. Besides, some of our old ST software will run on the TT. (Of course, the software that "breaks the rules" won't, and lots of rules were broken, so be ready for anything.)

UNIX, on the other hand, is a whole different breed of cat. If you hate Specialistese, it is time to run for the hills, screaming, when you see something labelled UNIX. Unless you are absolutely willing to become an utter SpecialistThing, you are going to hate/dislike/fear UNIX as soon as you turn it on, and get its "#" prompt. Sheesh, you even have to "log in" to it ... just like the horrid mainframe days!

UNIX geeks may best be described as the doctors of Computer Science. They don't speak in English. Listening to them is like reading a particularly dense medical journal. UNIXers make no effort to let their machines be usable by mortals, be understandable by mortals—it was for them, by them, and NOT FOR YOU, hear? It's a bit like segregation.

So, instead of the admittedly bad, but still somewhat English commands of DOS, we get UNIXese. Let's take a (shudder) look, shall we?

To get a directory of the disk, you don't type "DIR." You type "Is." (Is? What's that stand for? Answer: Don't ask. Really, never ask this question in UNIX. Also, UNIX commands are all lower case, to save the Specialist the awesome finger movement of pressing the SHIFT key. Regrettably, I'm not kidding).

But "Is" only gives you file names. And surprise! Subdirectories show up as file names, too, without anything to tell them apart from ordinary files. File sizes? Types? Who knows. It ain't printed out. What, you don't remember which ones were data files, which were programs, which were subdirectories? What sort of man are you, anyway? Go back to your <sniff> Macintosh and leave real programming to men.

Sigh. To get a REAL directory of your disk, with file lengths and stuff, you have to "Is -al."

Want to copy a file? Fine; the command is "cp," not "copy." It takes so much time to type in those two extra letters, you know

(honestly, I see discussions of how much more "productive" you can be with these abbreviations.) And "move" becomes "mv," no kidding.

We don't have "tags" in UNIX; those are the three letters past the dot in a filename. For instance, "PRG" is a tag in "COM-MAND.PRG". Well, in UNIX, you can use them if you like, but real Specialists don't. So you can't do something like type, "DEL *.BAK".

(Well, maybe you can, but I've sure as heck not figured it out.)

And instead of using a back-slash for directory names (e.g., C:\DAVE), UNIX uses a forward slash (/DAVE). Sure, I know UNIX came first, before MS-DOS, but I guarantee it'll drive you nuts trying to switch between machines. UNIX doesn't use things like drive letters; instead, separate drives become separate subdirectories. Kind of.

There's been a conspiracy, whoops, a convention built up of where certain files go on UNIX systems. Either you learn, and conform to the convention, or you're out of luck. Since my memory isn't as good as it was when I was young (I'm 31), I have to keep a list by the computers of where the critical stuff is.

Look, this is almost the 90's. You shouldn't have to keep ANY—THING on the table next to your computer. No cheat sheets, no lookup books. But with UNIX, you don't have a choice.

Let's find some key files.

- "crontab" is in /usr/lib. This makes things happen on a periodic basis.
- "cronlog" is /usr/adm. This tells you what crontab did or didn't do. If it didn't do it, heaven help you figure out why.
- "passwd", the list of users on the system, is in /etc. It's available to anyone, but, fortunately, the passwords in the file are encrypted.
- "L-terminals... or is it L.devices?"
 .. is in.. /usr? /usr/lib? No, it's /usr/lib/uucp. Excuse me, I had to look it up. If you get into UNIX,

be sure to have five feet of bookshelf space CLOSE BY your system.

Let's look at grep. "Grep?" Grep is a scanner; it looks through files for something you want. If I want to find all references to Dan Moore on my disk, I can grep * 'dan moore'.

Of course, I can't quite type that. I have to look up in my book the exact syntax to tell grep where to look, to look for Dan Moore ignoring upper case, and this and that silly options. Back to the manuals.

The key point is, instead of "scan" or "lookfor," it's "grep."

I hope you're getting the idea.

Some UNIX commands are named for people's girlfriends, boy-friends, or their names. I particularly like "awk," a program I don't pretend to understand, but is named for the initials of its creator.

Look, I'm not kidding. This is not April, this is not an April Fool's joke. There is an "awk."

And "yacc!" "Yet Another Compiler Compiler."

If at this point you feel like an outsider at a Star Trek convention listening to people talk about Klingons and Live Long and Prosper and the Vulcan Mind-Meld, you're getting the idea.

I have no problem telling you that UNIX is the most incredibly *user* hostile operating system ever invented. Keep in mind the "user" part of the above sentence. If you want to become a Specialist, and are willing to learn as an apprentice under the wing of another Specialist, you may be able to get along with UNIX. Maybe. Be prepared to feel like a total idiot for months.

UNIX people refer to UNIX Specialists as "gurus" or "wizards." With good reason. While they're good at UNIX, think of how friendly to common folk gurus and wizards (of the usual type) are.

Personally, I am barely on speaking terms with UNIX, after owning a UNIX machine for over a year.

See, for me, the idea was to tap into USENET. USENET is like Com-

puserve or GEnie worldwide. Lots of Magic Sac and Spectre stuff goes over USENET, plus the plain babbling that seems to go on all the time. (About four megabytes per day of information goes to each site on the USENET).

Problem was, to use USENET, I had to use UNIX. And with all the mv's and grep's and cp's, plus the fact my GURU (Dan Moore) that was apprenticing me to UNIX, is off at AT&T most of the time, it's damned hard to get anything done. In fact, my machine is down, again-for some reason, it's forgotten how to talk to the modem. ("/dev/tty000 is not recognized," it says. I say, "What? How can you know how to talk to the modem last night, you dumb thing, and not tonight?")

I made my usual stabs at trying to figure out what was wrong. They were futile, as usual. Worse, I know that Dan will waltz in here, say, oh, of course, vi gettydefs, downarrow, i, tty000 = hayes, x, DD, ESC, Z, and reboot, and everything will start working.

Regrettably, Dan will miss the sound of my teeth slowly grinding. Perhaps if I slowly sharpen my knife on a whetting stone he'll get the idea.

So I give you fair warning about the TT. If you're normal, use TOS with it. If you want to play games instead of getting things done, find weird, Weird, WEIRD puzzles, and spends hours on some of the poorest documentation ever written, well, get into UNIX. (If you're that sort of person, the world probably doesn't want to interface with you anyway.)

One quick way to tell a UNIX programmer from the rest of us is that they all tend to have ponytails. Holding the ponytail together is a rubberband from that morning's newspaper. Lest you think I'm kidding, go into any UNIX shop and look around.

Conclusion

UNIX: the Esperanto on the 90's.

I fear we're stuck with it, due to

some of the good things about its design, but the way people have to talk to UNIX is awful. UNIX should prove responsible for a whole new generation deciding that computers are beyond them, just like IBM did. It should sell lots of Macintoshes.

With any luck, someone from Atari management will sit down and try to use UNIX before trying to ship it with a computer, realize the horror story they're about to unleash on their Technical Support department, and trashcan the project. (It's a wonder the project has gotten this far).

English is for people. UNIX isn't at the moment. Until some sort of decent, user-friendly interface is put on it,

it's going to stay that way.

UNIX lovers are reminded that the usual address I give is invulnerable to letter bombs. Also, my UNIX computer (boulder!tcr!gadgets!) is invulnerable to UNIX mailed (UUCP'd) viruses... because it's usually down.

Hey, maybe there's something to this UNIX after all. See you next month. Until then, may the grep be with you.

-- Dv Sml.

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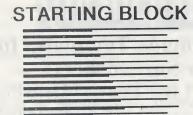
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Inquiries Welcome



by Richard Gunter

When I bought my new ST, the venerable 8-bit system had to go; there just wasn't room for me, the wife, and two computers in the bedroom. Sometimes, honored Spouse hints that there may not be room for one, but I don't want to talk about that...

It seems there were some files accumulated over the years that I really didn't want to throw away. It'd be nice, thought I, to transfer them to the ST before disposing of the 8-bit system. But how?

The answer was to connect the two computers with a null modem, and "upload" those files to the ST. I had purchased *Flash* for the ST, and already had a communications program for the 8-bit computer, so all I needed to do was get a suitable null modem and learn how to use it.

Null modem?

A null modem is a device (usually a cable) that allows two computers to communicate without a modem. Hence the name: Null. Modem. The cable is made so that one computer's output is the other's input and vice versa; the idea is to fool each computer into thinking it's connected by modem to another computer.

One end of my null modem plugs into the "modem" port at the back of the ST. The other end plugs into the serial port on the Atari 850. Clearly, if you want to have someone make a null modem cable for you, you'll need to tell your benefactor exactly what computers (and interface units) you have. It's not a bad idea to have the technical manuals available, too.

(Very) Local Communications

If you're technically inclined, you can make one of these things yourself, or have a repair shop make one for you. The accompanying table shows what I fondly believe are the right pin connections for making a null modem to connect an ST to an Atari 8-bit computer using an 850 interface. (Thanks to John at L&Y for checking this for me. Hope I didn't mess up copying the notes). If you make one yourself, you'll need a female 25-pin connector for the ST end, a male 9-pin connector for the 850 end, and a length of cable containing at least five wires.

Null Modem Pin Connections Atari ST to 850

ST (25-pin	850 (9-pin
Connector)	Connector)
2	4
3	3
4	8
7	5
8	7

Setup Procedure

With everything powered off, place the two machines close enough together that the cable will reach, and hook up the null modem.

Next, boot both machines (order doesn't matter) and load both tele-communications programs. Loading the software is no different from getting ready to dial up your favorite BBS. Both communications programs loaded? Ok, now make sure that both programs initially are set up the same way—as though you were about to dial an ASCII BBS, such as ARMUDIC.

You should designate one machine to be the "host" for this operation, and the other the "remote" terminal. In the host, alter

the software settings as follows. Set half duplex on, set echo on, and set linefeed on. For Flash, the commands are "EC ON," "DU HA," and "LF ON." Make sure that the baud rates are set the same on both machines. You can probably use the fastest baud rate that both terminal programs can handle. Make sure the Xmodem file transfer parameters are compatible--if your 8-bit terminal program supports 1K Xmodem blocks, set both systems to use it, otherwise set both to 128-byte blocks. Likewise, set both terminal programs for CRC Xmodem or checksum, as appropriate. The figure on the next page shows Flash status when the ST is set up to act as the

Now force a "connection." For Flash, this simply means clicking on the right mouse button to get to the terminal screen (the one that does NOT have a GEM menu bar at the top). At the 8-bit side, it depends on which program you're running; usually the command is something like "terminal mode."

At this point, you should be able to type a message on either key-board and see exactly the same thing on both screens. This is mildly amusing, but kind of like talking to yourself, so let's try a file transfer. Pick a small file at first, just to make sure everything is working right.

Doing File Transfers

The terms "upload" and "down-load" can get a bit confusing here; just remember that whichever computer is to transmit the file (the sender) will be told to upload, and the receiving machine will be told to download. At the receiving machine, enter an Xmodem download command. At the sending machine, enter

an upload command. For Flash, these commands are DL XM filespec and UL XM filespec, where filespec is a complete path name for the file.

As soon as you complete the upload command, the file transfer should begin, and it should go like a scalded bat! With no modems or

phone lines in the way, you'll see file transfers run faster than anything you've ever done online.

ATASCII to ASCII

Some of the files I wanted to transfer were produced by a word processor on the 8-bit machine. I saved the word processor files as plain ATASCII text files, and

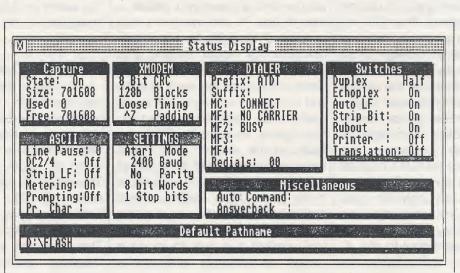
transferred the files to the ST using Xmodem. Finally, I converted the files from ATASCII to ASCII using CONVRT2.PRG on the ST.

That was the most straightforward method for me; I found the Xmodem transfers and a separate conversion step to be less hassle. Alternatively, you could try to get Flash to do the conversion for you on a text file transfer into the capture buffer. I never got this method to work right, but I didn't try very hard either.

If you're interested, you might want to experiment with it (let me know if you get it to work). The basic idea is to tell the 8-bit machine that it's running in ATASCII mode, and tell Flash that you're talking to an ATASCII machine. That last involves loading the ATASCII translation table that comes with Flash, and turning on Flash's translate option. You'd then use a text upload command at the sender, and the receiver would have to "capture" the text.

Picture Files

I also had a library of CompuServe RLE format pictures, and some Koala/Microillustrator pictures that I wasn't quite ready to discard. Just transferred both sorts with Xmodem, and converted to Degas format with the PICSW7 utility. Simple!



Flash Options -- Host Setup

GIF pictures are already machine-independent, so no conversion was necessary for those.

ARC Files

The 8-bit version of the ARC program is compatible with the ST version. You should have no problems here, but don't trust me — check it out. If you're transferring files from an ST to an 8-bit Atari, just make sure you don't use the "squash" algorithm; it's fairly new, and I doubt that the 8-bit program can handle it.

A Bit Less Local

Calling a friend who DOESN'T operate a BBS is really no more complicated than using a null modem in your bedroom. Both of you need a modem, of course, and you need to agree on the protocol settings you're going to use (the parity, 8-bit word, and stop bit stuff in the figure). You'll also need to agree on the baud rate in advance; use the fastest rate that both

modems support. Find out what Xmodem parameters you have in common (1K/128 byte block, CRC/checksum). Again, one of you must agree to act as the "host."

If your modems support a command that allows you to turn the modem carrier on manually, you can make a voice telephone call, set up

> your system options, turn on the carrier, and hang up the handset. MV modem doesn't seem to do that. so I have to use the alternative. After both systems are ready to go, both parties hang up. The "host" needs to have a modem that will answer the phone automatically. The other party dials the call by

modem, just like dialing a BBS. The "host" computer's modem answers, and you're in business.

Once the connection is established, you can type messages to each other and perform file transfers. As with a null modem, the receiver gives his/her system the download command, and the sender gives his/her system an upload command to initiate the process. Most telecommunications programs don't have BBS functions, so both users must give these commands manually.

Pebbles from the Bit Stream

I had occasion to call Word Perfect's technical support line today, and was informed that WP Corp. has begun work on a driver for Ultrascript. From WP through Ultrascript to the printer in one swell foop with real proportional spacing. Hmmm, what was that price tag again?

Stellar Crusade

An Uphill Struggle to a Just Reward Review by Milt Creighton

Stellar Crusade is distributed by Strategic Simulations, Inc. (SSI to the initiated), but it came to them as a nearly complete package from Norman C. Kroger, Jr. More than anything it demonstrates the results of enormous research and legitimate respect for the genre, flawed only in its production. You might be tempted to stop reading at this point, thinking you have the heart of this review. You do not. This is an excellent game, arguably the best of its kind, but you must do your homework before you can even begin to understand how to play it. In this review I will attempt to explain the gaming concepts employed, provide a qualitative opinion as to SSI's success in implementing them and provide enough information to get you started. Along the way, I shall also offer a few strategy tips for your consideration.

The Predecessors

For those of you who do not follow space conquest games, the genre has been around long before computers became small enough to put into homes. They even predate the massive exercises found nowadays on GEnie and Compuserve. The earliest offerings of which I am aware were not even boardgames in the true sense, though they had already evolved from the miniature combat rules of their predecessors.

The first may have been Lens-man, played with paper ships and rolls of twine and produced by a minor player in a small market. Some years later came Stellar Conquest from Metagaming, novel in its approach to space exploration, empire building, technology, if not in actual combat. The game was so

popular that it was only a matter of time before it was rendered into code and brought to the home computer by Roger Keating and SSG to become Reach for the Stars, still one of the most popular and enduring microcomputer space conquest games. Another boardgame, Imperium by GDW, introduced the idea of jump routes between the stars and the concept of "high ground" found a foothold in the genre. Now Stellar Crusade melds both concepts into a single game of layered complexity, lovingly crafted and true to its roots -- and exceedingly difficult to master.

Poor Documentation

The reason for many of the difficulties players encounter lies in the documentation. To call the manual awful would be an understatement and still damn it with faint praise. It is simply atrocious. It is impossible to learn to play the game with any degree of grace using the present rulebook. While the rules (35 manual-size pages long) contain nearly all the information you need to play the game, it is so poorly organized it doesn't prepare you to actually execute the game except in the most rudimentary sense. What is so surprising is that it doesn't appear to be disorganized. A first reading acquaints you with basic information and then directs you to stop and play one of the introductory scenarios. You feel ready to try it too, until you boot the game only to find yourself lost in unfamiliar menus. However, rather than complain endlessly about the manual (I could, too!), I will try and provide enough information here for you to commence

the game and then suggest some strategies to try in the campaign scenario.

Historical Depth

To begin, there is a nifty bit of pseudo-history to tie the game together--the best I've yet seen in any game of this type and a great deal more interesting than that provided for most adventure games. The action in Stellar Crusade takes place in the 24th century in Kiffryn's Cats Star Cluster, a remote cluster of about 25 habitable star systems. The stars are settled (in varying degrees depending upon the scenario) by two groups of colonists. The first are prototypical capitalists who call themselves the Corporate League (the League, for short).

A human player always plays the League, but the opponent can be human or a very nasty computer player. The opponent, by the way, goes under the title of the People's Holy Republic (the P.H.R.) described in the manual as "Neo-Christian Communists of Northern and Central America" who fled the collapse of the Peoples Holy Marxist Union of Northwest American States in the latter part of the 23rd century. To top it all off, the P.H.R. is ruled by a religious oligarchy that would be the envy of fundamentalists and zealots anywhere. Naturally, the P.H.R. take the very existence of the League as an affront to everything they hold dear and are desperate to declare a Jihad to destroy them. Only the power of the Terran Navy holds them back. By a stroke of bad fortune, however, the Terran Navy is recalled to Earth and both sides begin to prepare for war.

Getting Started

You will need to read the manual--probably several times, in fact. The rules are presented in bite-sized chunks, at the end of which you are offered the opportunity of playing beginning and then intermediate scenarios. Do it--even if it hurts. You will learn invaluable lessons just by trying things. Play the Gold River scenario first and then later (when you are told), try the Exploration scenario. After that, you should try the long campaign scenario with the optional rules (Command and Control, fog of war, and maintenance) turned off and the computer opponent set at "pushover" (don't believe it). Play a good ten years (40 turns) and then quit and compare what you have built to what the computer has done. Compare that to the victory point totals which are updated every turn and you will learn quite a bit about the game. Reread the rules at this point--some of the more obtuse text might actually make sense. Then you can begin to play for real.

Stellar Crusade is really more a game of economics and strategy than a wargame in the strict sense of the term. The battles fought between opposing fleets and on planet surfaces are somewhat abstract with the player having little control over anything but the most general tactics employed. However, the player can have a decisive impact on the battles by the manner in which he prepares for them. By that I do not mean that success is determined entirely by the marshalling and movement of forces. The real meat of Stellar Crusade is deciding whether to make guns or butter and where and when to do it.

The Economic Phase

Stellar Crusade is played in a number of game turns (each turn represents three months on the standard Terran calendar) divided into phases, as one might expect.

The beginning of a turn (after the first) permits the player to save the current game. This is followed by the P.H.R. Economics Phase (if you play the solitaire version, this goes by so fast you won't even notice it). Then the League player plots his economic expenditures. You will quickly find this is no easy task. There are just so many options to choose from, each one having ramifications which become manifest only when you are well into the game.

The first thing you want to do during this phase is check the status of your transport pool. It is an easy thing to overlook, but once the Terrans leave, it can quickly become critical. The transport pool is your merchant marine. These are freighters you have built to carry raw materials between your planets. It is important to realize that in order to create one "build" point (the coin of the realm) you must satisfy the following formula: 1 food + 1 metal + 1 organic + 1 factory = 1 Build point. Each farm you have produces 1 food; similarly, each mine produces 1 metal and refineries each produce 1 organic. Farms, mines, and refineries cost varying amounts to build on each planet, depending on their accessibility, and the quality and quantity of basic materials. Farms might be horribly expensive on a world in which mines are cheap.

One secret to the game is to develop specialty worlds which produce inexpensive raw materials of a particular sort and then allow your transport pool to move the surplus to where it is needed. It is not the balance of industry on any one world which is necessarily critical since your entire empire can draw on the surplus, provided you have enough freighters assigned to your transport pool.

Once you've examined the transport pool, select the menu item "Report." The graphs dis-

played in various colors depict the current status of your mines, refineries, farms, transport pool cargo space, etc. This is not always that helpful except when it points up those areas where you are over or underspending. Ideally, the lines should converge with an upward slope. The real help for beginners lies in the suggestions which appear under the chart. The computer will suggest fiscal spending policies for the next quarter, movement of colonies, and even tell you when it is prudent to worry about defense. Once you've played a bit you may want to diverge from the computer's short term suggestions to pursue higher-payoff, longrange strategies, but while you are learning it's a good idea to heed the computer's advice.

Now you are ready to begin the economic phase in earnest. The production screen will display the industry of each world upon which you have factories and will credit you with the number of build points that world produces from its own resources. You may select the order of production of each world in your empire, or you can have the computer do it for you. (This will be an important feature when you are trying to establish a colony.) At this point, you may draw from your available resource pool to reduce the number of idle factories and increase the number of build points each world produces. You want to think about this a bit first. If you are trying to get a colony started, and you use up the resource pool, you will find yourself locked out of any production on the new world.

Once you've settled on the production of build points for a world, the next two screens will allow you to spend them. The first screen allows for capital improvements. You can allocate build points for creating new farms, mines, refineries, and factories. Note that you cannot exceed the maximum realizable potential in

each category for each particular world (except with kits), and items vary widely in cost from world to world. Be smart about how you allocate your build points and don't buy expensive mines (for example) on one world when they can be had for a fraction of the cost elsewhere.

On this screen, you can also expand the capacity of your shipvards (three to a planet), training centers (for production of military units), and intelligence centers (to keep out despicable P.H.R. spies!) Just be aware of the fact that each new item you buy requires a point of idle population to operate it. This gets important when you learn you need to build five farms on a new colony world but the computer won't let you because you don't have the resources to man them. The transport pool doesn't ship people around either--you have to do that yourself.

The third screen completes the production process for each particular world. Note that you have the chance in both the first and last screen to abort production and start over -- even with another system. This allows you to try out several spending schemes without having to commit yourself. Here you also allocate build points for production of ships, military units, and transportable (and hideously expensive) farm, mine, factory, and refinery "kits". You can put any portion of your build points (up to the capacity of that shipyard) toward the production of a ship that may take several turns to produce. The same goes for military units, but kits must be paid for up front. And you must have factory kits for new colony worlds, because you may not transfer build points from one world to another; whatever a world produces must be spent there. It takes a minimum of 10 factory kits for a new colony world to become selfsufficient.

Tool-up Costs

On the matter of force production, note that the third production screen also allows you to select the item the shipyard or training center will produce. Be very wary of using this feature unnecessarily. There is a hidden tool-up cost you incur every time you change production models or unit types. If a shipyard is producing freighters, for example, and you want to change over to escort cruisers you will find you may have to pour up to 3 or 4 times the per unit cost into the shipyard before the first ship is completed. After the first one, subsequent ships will be produced at the normal cost. Later, if you decide to return to producing freighters again, you'll have to pay for vet another tool-up. You will have to occasionally change production items to meet critical needs--just try not to do it needlessly. The same goes for the training centers.

Research and Development

What about Research and Development, you ask? There isn't a line item on any of the production screens for that. Is it important? You bet. There is a telling quote attributed in the manual to one of the League Admirals: "In space there are no battle lines, no convenient bits of terrain to help delineate the edges of contested territory. There are only skill and technology. Fall behind in either one and you lose. Lag in both and you lose without knowing why."

What does technology do for you? It improves the fighting power of your ships and increases their range of movement. It also increases the power of your military units. A single level advantage in technology of one side over another in combat is useful but not overwhelming. More than one can be devastating.

So how do you spend build points on R&D? Whatever build

points remain after you have settled on all your expenditures on each world go into R&D. You won't find that in the manual, but it's true nevertheless. Don't neglect this aspect of the game, but you can't throw everything you have into R&D either or your economy will cease to expand. Also, be aware of the retooling cost of higher technology. What that means is once the tech level of a ship is established in a shipvard, every ship of that production run will be at the same tech level--even if you've had several technological breakthroughs in subsequent turns. It will cost you a tool-up each time you raise the tech level. It makes sense if you think about it; at least that's what all the defence contractors are saying nowadays.

The Movement Phase

Once you have completed your Economics Phase, it's time to go to the respective Movement Phases. (It really doesn't matter who moves first since the execution is carried out simultaneously in the Resolutions Phase.) Upon entering the Movements Phase, the first thing vou want to do is access the Training Command item. This screen will display all the new ships that were built during the last turn. All new ships go to Training Command first and will remain there until you give them their postings. Once you have assigned them to their new commands, they disappear from the Training Command roster. You can monitor their progress and check their arrival dates during the next several turns by activating the "Ships in Transit" screen. This is a good place to note that ships assigned from one command to another take several turns (up to 4) to arrive. New crews must be trained, ships must be refitted and all that. Transfers of ships between task forces in the same star system, on the other hand, is instantaneous.

There are lots of places where you might assign ships. The Transport Pool is one likely place for freighters, but you will also need freighters assigned to task forces to carry colonists, exploration teams, military units, and factory kits from one planet to another. You will need to have enough escort ships assigned to Escort Command by the time the Terran Navy leaves to protect your Transport Pool from the deprivations of enemy raiders, or you will suffer severe economic repercussions. You may want to build and assign your own raiders (especially i-space ships) to your Raiding Command to attack the enemy's shipping. If you do, he'll have to balance his spending to protect his own freighters from you, and this is one area where the computer player doesn't do well at the "pushover" level.

Ships can also be assigned to Special Support Command to support Special Operations (read spying) or to the Fleet. The manual isn't all that clear about it, but any ship assigned to a task force is part of the Fleet; ships that are assigned to any other command are not part of the Fleet.

Ship Design

While on the subject of ships, I should point out that the League ships are inferior in basic design to the ships of the P.H.R. Try the Gold River scenario and check out the losses on either side. If you insist on playing with the standard League ships, you should have an advantage of about 1.5:1 at the same tech level before attacking a P.H.R. force. Since the computer player has a tendency to split his forces, such odds are occasionally obtainable.

There is no reason to play with the standard design League ships, however, since you can design your own. The game includes a very nice ship design module and you can spend lots of time trying to find the

optimum mix of ship systems. There are a lot of them too: long and short range offensive and defensive weapons for both real and imaginary space, target acquisition systems for both kinds of space, i-space drives, command and control modules, and cargo and assault capacities. Keep one thing in mind about designing your own ships: the new designs have to be set before you begin production during a turn if you want to begin building them that turn.

The Resolutions Phase

During the Movement Phase you can move freighters carrying exploration teams around, load colonists on a freighter, transport them to a new colony, and unload them--all as part of the same movement turn. You can move ships to block certain natural choke points (given the concept of jump routes, blockade ships become viable). You can also load military units on assault transports and take your entire fleet to invade an enemy planet. Combat resulting from having enemy forces with attack missions in the same system are resolved during the Resolutions Phase.

Optional Rules

There is really quite a bit more. Some of the optional rules include Fog of War (hidden movement), Special Operations (discovering enemy Fleet movements, fomenting rebellion, and obtaining economic intelligence on enemy systems while attempting to protect your own systems from enemy Special Ops), Maintenance (keeping ships and troop units in supply), and Command and Control. The Command and Control option is quite interesting. When this rule is invoked, all task forces will be assigned to a commander of your choice. Commanders are rated for their offensive and defensive capabilities (ship to ship combat) and space to ground assault capability. Some are good in one area and poor in others. Some are good all around. Still others should be shot for impersonating an officer. The problem initially is that you don't know the rating of your commanders until they have been through the crucible of combat. Neat, huh?

Strategies for the Campaign Scenario

It's difficult to get started the first time you play the long campaign scenario so permit me a few suggestions. On the first turn you will find that you have three exploration teams but only two ships. You have but a few freighters and no warships. Your home planet, Alger, is limited in its mineral wealth and Laird's Star is even worse. What do you do?

During the first few turns it is probably a good idea to concentrate your resources on building freighters and factory kits. The Working Girl isn't a bad ship, but it is inefficient from the standpoint of shipping earth–like colonies. You might want to design a new freighter with a cargo capacity of 9 for that purpose, but before you do think about whether you want to pay the start–up costs.

Unless you are playing with the optional maintenance rules turned on, don't build another exploration ship. It's a waste of money. Chances are, you won't get it finished before your other two ships have finished the job. It's also a good idea to build whatever refineries and/or mines you can afford on Alger the first turn-production of factory kits can wait until the second or third turn. You'll run up against the planetary maximums pretty fast since Alger is developed nearly to the limit of its potential. As for your second planet, you'll find that farms are expensive on Laird's Star at first, but they will get cheaper over time.

Once you go to the Movement

Phase you want to load your refinery and factory kits onto your freighters in orbit and then immediately unload (deploy) them back onto Alger. There's no reason to ship them anywhere and you can use the surplus to expand the potential of Alger well past its planetary maximum.

During the same phase, load your exploration teams on your two exploration ships and send one to Kiffryn's Star and the other to Bennet's Star. By now you have noticed that the screen star display bears no resemblance to the Route Map on the back page of the manual. Do a screen dump to your printer and write in the name of the stars and the jump routes if you like. Also, be sure to recall the two freighters from Laird's Star back to Alger. You'll need them to carry colonists to your new colony.

The second turn of the game will permit you to access information about the star systems you have explored. If you don't find a planet of Habitability: 80 (or better). Metals: 100, and Organics: 100 on either of the two stars in the paragraph above, quit the game and reboot. You can't win (especially not as a beginner) trying to build a colony more than one jump away. Ship the colonists first, then the factories, then the farm kits. Use your transport pool to carry the surplus materials. Be sure to select your colony world for production first on subsequent Economics Phases. That way the new colony will get the first shot at surplus raw materials. Soon you'll find the new colony becoming independent and building inexpensive mines. refineries and factories.

General Tips

A few more tips: Don't build a navy right away. The Terran Navy will protect you from the P.H.R. for the first 40 turns. Even after they leave, the enemy player is prevented from engaging in open hostili-

ties for several more turns. Don't fritter away your resources by trying to colonize more than one planet at a time.

Don't be afraid to use protected or belt colonies in your new colony world if earth-like colonies are not available. Even your new colony world will begin to produce colonies of its own—consider redeploying them back to the population—starved world you are trying to colonize. Do explore every unclaimed star system. They are worth victory points and the fact that you have claimed them keeps the P.H.R. out, at least for a while.

You may want to garrison the better worlds with troops before hostilities start—just remember to consider the maintenance requirements if you have enabled that option.

Remember there is an absolute limit of 120 ships of all types for each side. Don't fill all your slots with glorified fighters when what you really need are battlewagons. If you find your shipyards have stopped producing ships even though there are enough build points accumulated to commission them, the chances are that you are at the 120 ship limit. If that happens, you can send some of your older warships off on a suicide mission and use the slots from their losses to produce new ships. Alternately, you can scrap ships by sending them to the transport pool and then selecting the "scrap" button.

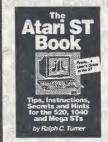
The Bottom Line

Stellar Crusade is not a game that would proclaim its worth to the casual player. It is intimidating — more so than it ought to be, in fact. It doesn't have spectacular graphics, nor is that necessary since it is not a graphics—oriented game. It is copy—protected, but the protection is of the document—check variety so you can run the game off a hard disk if you want. You may not really need to though because Stellar Crusade doesn't access the disk after it loads.

It should be said that this game is very complex with layer upon layer of sophistication. One of its attractions is that there is very little window dressing in *Stellar Crusade*, its many facets are integral to the game and significant in their dynamic impact. This is one you'll have to do your homework on to master.

Having said all that, I should also state that, in my opinion, it is far and away the best of the space conquest games. It captures the heady excitement of exploring the unknown, the megalomanic fascination with detail of empirebuilding, and the queasy uneasiness of allocating limited resources in an uncertain universe. Stellar Crusade has not gotten the attention it deserves and that's too bad. It is a stellar game.

The 159-page Atari ST Book, by Ralph Turner, author of ST Informer's Help Key column, begins where your owner's manual leaves off. "Very



useful on every level, from rank beginner to the most advanced ST owner." (ST Business.) "Genuinely helpful... multitude of tips.. pure pleasure." (Current Notes.) \$16.95 + \$2.00 shipping. Check, Visa/MC. Index Legalis, P.O. Box 1822-23, Fairfield, IA 52556. (515)472-2293



MEGA TWEETY!

Sounds You Never Heard Before

Reviewed by Charles Crook



A Few Tools

This review deals with the Tweety Board product from Practical Solutions. This product, which is installed inside your CPU, is designed for all versions of the ST (520, 520FM, 1040 and Mega) and gives true stereo sound output.

The kit contains the Tweety Board packaged inside form-fitted foam, a RCA style Y-connector cord, the warranty and installation instructions. You will need a Phillips screwdriver and a pair of needlenose pliers to install the board.

The 28 pages of instructions are broken down by machine: 520 (with external drive), 520FM (with internal drive), 1040 and Mega 2 or 4.

Afraid of Hardware?

The documentation is amply filled with illustrations showing the various stages of installation; a welcome relief to a hardware-phobe like myself. The total time for installation, which includes disconnecting all cables from the CPU, took about an hour. Most of that time was spent reading each section two or three times to make sure I knew what I was doing. As it turns out, it seems my particular Mega is missing a few bolts that the instructions mentioned, so the install time may be somewhat longer for other machines.

For a Mega, you must remove the plastic outer case, and then the metal shielding within to expose the motherboard. The manual notes that on some 520s, 520FMs and 1040s, the metal shielding covering the motherboard is actually soldered down. On the Mega, the connections can be freed with the needle-nose pliers. I had never

opened the case before this, so I took some time to examine the board in detail.

The connector for the board must be placed on top of the Yamaha sound chip, which is underneath the power supply. The documentation is very thorough on



Sound Extraordinaire!

how to piggy-back the connector onto the Yamaha. The connector chip is also clearly marked to indicate "pin 1" to match the same pin on the Yamaha. The suggested location for the board itself is over by the blitter chip, although the ribbon cable between the connector and the board will allow other placements. The final trick was to' slide the motherboard forward slightly to allow the stereo patch cord connector to be sent out thru the DMA port. It can also be sent thru the serial or parallel ports; the DMA is closest and easiest.

After closing the machine back up, and connecting the spaghetti of cables back together, I powered up Obliterator and spent some time comparing the sound between the normal monitor output, Monitor Master sent thru a stereo, and Tweety Board sent thru the stereo.

Tweety Board won without even breaking a sweat.

I heard sounds and notes that had been buried before, with very good clarity. I can foresee evaluating games based on their sound-track, rather than only the game itself. In fact, one game that is somewhat mediocre, *Vampire's Empire*, is much more fun to play with Tweety Board online.

A Buzz?

Not all games or sounds will be improved with the Tweety Board; digitized sounds will have an annoying buzz and seem to be only using one channel. For games such as Terrorpods, Shadowgate, etc. I would suggest using one of the other output methods for the sounds. Such programs as GIST. and ST-Replay suffer the same effect, along with ST-Talker. The manual explains that such programs will suffer somewhat due to their design. I don't consider that to be a problem with the board, but rather with the original design of the sound in the ST itself. I didn't test any music programs--I don't own any--but music should also be greatly improved, unless digitized.

Tweety Board comes with a 90 day warranty, and retails for \$59.95, although I purchased mine for \$53 at my favorite local Atari store. It is easily worth twice the price, and congratulations are in order for the folks at Practical Solutions for the birth of another great product.

[Practical Solutions, 1930 E. Grant Rd, Tucson, AZ 85719 (602) 884–9612.]

TECHNO COP

Super Cop Of The Future In A Troubled World by Brian Miller

Can You Handle The Brutality?

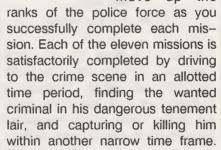
"Time to wonder what it must be like to strap on a gun, pin on a badge and become a L-a-w-M-a-n." Many in the Washington D.C. area will recognize this introduction to a local radio skit characterized by violence, extreme

the game I am about to describe, is bound to titillate these primitive instincts and hopefully give you a way to vent them in a harmless diversion.

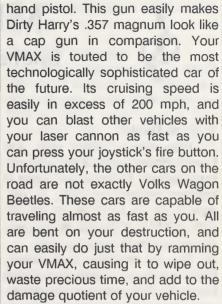
The Game Begins!

Techno Cop, by Epyx, Inc., presents a view of the 21st Century in which good guys are an

endangered species. As one of the presumably good and certainly endangered folk, it is your job to kill, capture or evade almost everyone else you encounter. As a peace keeper in this troubled future, you move up the



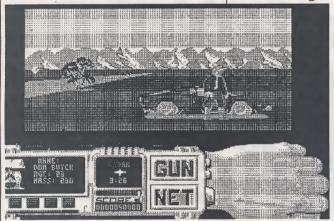
To give you a fighting chance, you are furn-ished with a VMAX auto-mobile, complete with laser cannon. For tracking down criminal types on foot, your service weapon is nothing short of an .88 m a g n u m



You will miss 50,000 potential points and blow your chance for a promotion if you fail to arrive at a crime scene on time. However, this is but a temporary setback. If you crash too often you can damage your VMAX beyond repair. This leaves you as good as dead, and the game is over.

As you race to the crime scene, the on board computer will provide a readout of the distance from the crime scene, your ETA, and the health of your car. You will have to use your judgement to decide whether to outrun other vehicles or to position for the kill.

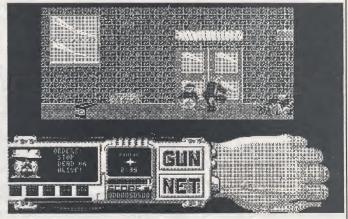
I have blown more than one chance at promotion as I have struggled to bring the laser cannon to bear on another car or harder to



ON FOOT

danger, magnum weapons, and speeding police cruisers. This air waves fantasy is served up by "Washington's favorite dumb jock," the Grease Man. To most folks who hail from the Metro area or its suburbs, the sound of his voice causes a knee jerk reaction.

Those totally appalled and shocked by his brand of brutal humor respond by spinning their radio dial to the refuge of the nearest easy listening station. If you would imagine yourself to be similarly distressed, you may wish to skip the rest of this review. I am sure this issue must cover other games which are less graphically violent, or offer some socially redeeming value. If, on the other hand, you even begrudgingly acknowledge an ignoble side to your existence, or heaven forbid, embrace it, read on. Techno Cop,



SHOOTOUT!

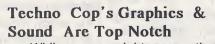
hit motorcycle. More often than not I accomplish nothing more than eating away precious time. But Boy, it is extremely gratifying when I have managed to hit one of these moving targets. I am instantly

these rapacious rodents nips your big toe, or takes a chunk out of your leg, you will be made temporarily lame, and your progress will be slowed down. To guide you as you travel through the dangerous tenements,

vou are outfitted with a wrist command console. It provides you with radar, a score counand ter, strength indicator. The radar sounds when you get close to the crime boss. It is important to approach cau-

tiously, since the game promises each bad guy has a nasty surprise in store for the unwary. If you bag him within the allowed time period you increase your score by 50,000 points.

If you have met the preceding objectives, by making it to the scene on time, you will also increase your rank. You begin the game as a grunt. With your next promotion, you are promoted to a rookie. You will earn the coveted rank of Techno-Cop, only after you have made it to all eleven tenements, capturing or killing all the crime lords. The game can be saved, so if you manage to complete one level, you can save the game at this point, making it more likely for you to make it to the top of the ranks of the police force.



While some might argue that Techno Cop's theme runs a bit shallow, and that it may be of questionable moral value, few will quibble about its excellent graphics and sound. The VMAX is a bright Fire Engine red. Its dash is well equipped with very realistic instru-

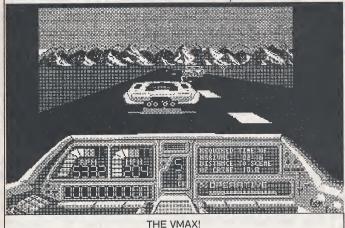
mentation. It growls at idle and lower speeds. It screams to life at faster speeds, and you can clearly hear and watch your VMAX shift through the gears as you accelerate. The laser cannons' report is quite real sounding.

During the first phase of the game, you view the dash and navigate your VMAX simultaneously. Smoke billows from the tires when you lose control, or when the car brakes to a stop. The other vehicles are as realistically portrayed. Perhaps the only weak point is the country side. I find it to be a bit monotonous. The only noticeable change I have noted so far is in the color of the roadside. It changes with each level. When you begin the grass is green. At the second level of the game, it turns a bright red.

The graphics and sound of the second level of the game are equal to the first. As you arrive at the crime scene, you watch yourself emerge from the cockpit of the VMAX, complete with red uniform and "elephant pistol." You can continue to monitor the progress of the game by keeping an eye on your wrist command console, as well as guide your Techno Cop through the tenement. The wrist computer gives you a visual readout of your health status, the number of lives you have remaining, time left and points earned.

The red bricked tumble down tenements are very realistic. Any Building Inspector worth his salt would condemn them on first sight. The swarms of criminal henchmen are portrayed as punk rockers, complete with hair dyed to unnatural colors. None I have encountered so far have pistols, but they are deadly accurate with throwing stars, chains and other weapons you would expect to be used by punk types.

Occasionally, you will encounter an innocent bystander. 5,000 points are deducted from your



rewarded by a very realistic sounding explosion. My opponent is reduced to a dirty cloud of smoke which my VMAX slices through as a final gesture of my ephemeral superiority.

The on board computer racks up from 500-2000 points depending on the type of vehicle destroyed. The computer also alerts you that a crime has taken place, and automatically pulls your VMAX over when you arrive on the crime scene.

Bring Em Back, Dead or Alive!

Believe it or not, driving the VMAX just begins the fun. If you had problems navigating your police Hot Rod, blowing up other motorists, or evading them, you are in store for a world of trouble for the second phase of the game. Traveling on foot is very dangerous. Each of the eleven tenements is home to a crime "King-Pin" and scores of his nasty lackeys. Not unlike today, these tenements are also home to rats. However, the rats of the 21st century are the size of Cocker Spaniels with the disposition of rabid Doberman pinschers. If one of

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score if you kill one of the innocents. I have met the same little girl jumping rope at the entrance to the tenement building, at each of the levels I have come to so far.

If you have ever wondered what a large caliber weapon will do to a human being, even punk types, no doubt will remain in your mind after playing Techno Cop. Let me assure you, it is not a pretty sight to see or hear a fellow human blown into a bloody pile of guts. All issue the same death scream as they are turned from thug to ground meat.

Techno Cop's Documentation

The game documentation is adequate, but somewhat sketchy in providing details. Techno Cop is also made for IBMs, Apple IIs, Amigas, as well as ST. The instructions do manage to cover differences in play for each model. It is fairly clearly presented that the Amiga and Atari versions of the game are created with more graphic detail. For example, motor cycles and "hitchhicking punks" are limited to the Atari and Amiga versions.

The game documentation does not state whether the game is copy-protected. I have not been able to make a working backup copy, although I have not tried to do so with a copy program either. It would have been nice if the instructions said so for sure. The game allows you to save and record your score at the end of each game you play. I have been doing so on the original disks themselves, since an alternate or preferred way is not specified.

The game comes on two single sided disks. Booting up is fairly painless. You simply load Techno Cop from disk A, and you are directed on screen what to do. from this point. Once the game is loaded, you can re-start play without having to reboot, since the game remains in memory. I find this to be a welcome feature.

Should You Buy Techno-Cop?

Each person will have to decide for himself, alhough I am willing to offer the following thoughts on the matter. If you find yourself on the verge of retching at the thought of watching a Dirty Harry or Mad Max movie, then Techno–Cop is probably not going to be your cup of tea. If National Geographic's film footage of small animals stalking and devouring insects causes your palms to sweat, then you should play Techno Cop at your own risk. However, if you could imagine yourself being able to handle the two preceding examples without much difficulty, then Techno–Cop may be just right for you.

EPYX, 600 Galveston Dr, PO Box 8020, Redwood City, CA 94063 (415) 368–3200.

Carrier Command

by Roger Abram

23 Hours

After reading the documentation for Carrier Command, by Rainbird, it was easy to feel overwhelmed by the multitude of features that the game employs. It's not only a battle strategy game, but it's also a flight, amphibious tank, and warship simulator. To master all of the controls would take an appreciable investment of time. And now, after 23 hours of play time (or "program evaluating" as I need to refer to it in my household), was it worth the effort? The answer is an unequivocal yes!

The premise of Carrier Command is simple: it was determined that a group of volcanic islands could be harvested for their energy supply in the not so distant future. Two carriers were constructed for this task and one was absconded and reprogrammed by dastardly terrorists. When your carrier arrives on the scene, the enemy ship has already begun to claim islands for its own and has established Command Centers and defensive weapons on them. The enemy carrier, Omega, has started at the upper right hand corner of the archipelago of islands while your home base is at the lower left. Using your carrier, the Epsilon, you must now claim free islands and reclaim islands that have fallen into enemy hands. Since the enemy ship will be trying to do the same, somewhere along the line you'll have to destroy it.

There are two methods in which to begin a game. You can select a pure strategy game where the only island in your possession is the home base and you must embark on a journey to capture free islands one by one until your island network is sufficient and close enough to take on enemy islands. The other method is the action mode where you begin with about 12 islands already in your control and you find yourself anchored off an enemy island poised to attack it. I recommend this latter mode because the islands in your network will essentially be the same ones that you'd control if you had labored through the tedious process of converting islands at the beginning of a strategy game. Save yourself hours of work and opt for the action mode. It will give you the opportunity to test all your weapons and equipment in the heat of battle. If your carrier is destroyed, you can always restart the game and practice some more.

Dropping ACCB's

To claim a free island, the carrier has to be close enough to it that an AAV (Amphibious Assault Vehicle) can be dispatched to the island to drop an Automatic CN REVIEW ATARI ST/MEGA

Control Center Builder (ACCB). The ACCB pod will automatically construct a Command Center of one of three types: Defence, Resource, or Factory, depending on which type you loaded onto the AAV. After the center is built, the island will become another link in your island chain depending on whether or not it is directly connected with your other islands. The island then goes to work producing materials necessary for the refueling and restocking of your ship.

Virus Bombs

To claim an island already in enemy hands, you must first either destroy its Command Center or hit the Center with a Virus Bomb which will convert the island to your control without destroying any of the structures already in place. The easiest and fastest method is to load a Manta (Multi-role Aircraft for Nautical Tactical Assault) with a triple cluster of missiles in its belly and two single missiles on either wing. As you approach the island, quickly find the Command Center and fire all five missiles at it. With proper timing, all missiles will be launched before the island's ground and air forces obliterate the Manta. If the first Manta didn't destroy the Command Center, immediately launch another Manta and attack the Center with another load of missiles. This second wave of missiles should definitely do the trick. Once the island is free, dispatch an AAV with an ACCB pod to construct a new Command Center and add the island to your network.

Inflatable Drones

Not only can the AAVs and Mantas carry a multitude of weapons, but the carrier itself has offensive and defensive weapons at its disposal. Decoy flares can be launched to divert incoming heat–seeking missiles. Surface to surface missiles can attack island ground sites if the carrier is anchored close to the island. Inflatable drones can be deployed in multiple configurations to surround the carrier and act as a buffer for incoming missiles. A high power chemical laser can be fired at intruding enemy Mantas as they approach the ship. If positioned extremely close to the island, the laser can also destroy a Command Center (this will take several minutes as the laser will overheat several times before the building takes enough hits to be destroyed).

Stockpile Island

Another aspect of the game involves refueling and rearming your carrier by visiting the island you have designated to act as a stockpile. It is here that all replacement missiles, bombs, fuel, etc. are sent through your island network to await being transferred to your carrier. Since the carrier actually has to travel to

the island to receive the replacements, it's best to always have the stockpile island close at hand. You can designate any island in your chain to act as a stockpile and many times I would assign the stockpile status to an island I had just added to my network and then wait a few minutes for new weapons and fuel to arrive.

How Long, Oh Mighty Commander?

After several unsuccessful starts learning the ropes, it took 23 hours of play to complete a game started in the action mode. The first few hours were exciting as the enemy carrier would take an island and I would steam towards the island and reclaim it. Several times I would arrive at an island under enemy attack and be able to scare away the Omega with a few direct missile hits. When I finally destroyed the carrier, it was almost by accident. Approaching an island under attack, I quickly launched a Manta armed with two missiles and a Quaker cluster bomb as I noticed the Omega anchored straight ahead of me. The Manta fired both missiles at the Omega, dove down towards the carrier, released the cluster bomb, and then I flew the Manta into the Omega's deck, kamikaze style. I then switched over to a view from my carrier and saw that in a few moments I would ram the enemy carrier from the rear! Clicking on two volleys from the laser turret, the Omega exploded. The program then asked if I wanted to call it quits or continue the game by reclaiming all the islands under enemy control. I opted to continue.

After the enemy ship has been destroyed, the game becomes very monotonous. Take away the pressure of hurriedly trying to claim new islands while protecting ones already in your network, and the game loses its appeal. A better scenario would have been an interim period of calm between the destruction of an enemy carrier and the launching of a newly constructed enemy ship. Since the game takes so long to complete, a period of four hours following the destruction of the Omega and the dedication of a new ship (Son of Omega) would make for a more satisfying game as you hurried to add more islands to your network before round two began.

Impressive

Carrier Command is an impressive game which can be played in its entirety with the mouse by simply clicking on the many icons that control every aspect of the program. Its many features and playability will keep you entertained for many hours as you attempt to master all of the weapons at your disposal.

Rainbird, PO Box 2227, Menlo Park, CA 94026.

Dear ST Friends,

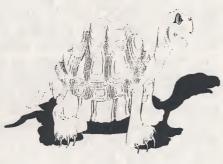
I've written to several clip art publishers to see what sort of clip art is available for the ST Desktop Publisher and I am happy to report that I found an abundance of high quality artwork.

In writing I asked each of the following for samples of their clipart, information about what format it was in, how much disk space it took up (an indication of how large the images actually are) and whether they could offer a users group a special price if several club members wanted to purchase in a group. I included a formatted dsdd disk and a self addressed mailer with postage for the return trip.

DRAWART & SCANART PROFESSIONAL Migraph Inc., 200 S. 333rd. #220, Federal Way. WA 98003

These guys also publish the *Easy Draw*, Turbo-charged *Easy Draw*, and *Touch-Up* programs. They have an excellent reputation in the Atari community.

These packages supercede their PERSONAL clipart. These are clearly the best of the bunch, and come from a top flight company. Migraph was sharp enough to market them in formats



that can also be read by IBM programs, Xerox Ventura Publisher & Timeworks Publish It (say this three times fast & you will be happy they didn't use the same name for the ST version). The 150 images in *DRAWART* come in *Easy Draw* format and will print out beautifully smooth no matter how large or small you make them. I have noticed that some lines can be lost if you make the clip too distorted from its original *shape*, but as far as *size* it will print out at the very best resolution your software/ printer will allow. *SCANART* comes in compressed IMG bitmapped form and is equally impressive. The 100 images included were scanned at 300 dots per inch and average about 350 by 350 pixels. Unlike DEGAS or other *screen based* clips which are limited to the 640x400 pixel screen resolution, IMG format bitmapped

clips can be any size or shape. One of the images is 1200 dot wide and 200 dots high. The result is that images can be any shape and print out nearer the maximum capability of the printer



KNOW YOUR

CLIP ART

By Menno Rapson



and software used. *Publisher ST* prints this IMG art out with extraordinary crispness. *Pagestream* prints somewhat less sharply, but this can be an advantage if you are printing pictures with gray scales (eg. sample Big Woody picture of Woody Allen that Soft Logik shipped with Pagestream)

This art is gorgeous, well organized (into the same categories professional printers use for traditional clip art), and reasonably priced. There is a personality to the clips that I find suits me particularly well. They look serious and artful. I will explain this more in my remarks on the Eykon graphics next.

DRAWART PROFESSIONAL comes on two double sided disks with a 4.25 inch by 5.5 inch index pamphlet with special tips on how to customize it with Easy Draw. List price \$69.95

SCANART PROFESSIONAL comes on two double sided disks with copied 8.5 by 11 inch index with information about the size of each clip in pixels. List price \$49.95

Eykon Computer Graphics Clip Art Eykon Computer Graphics, P.O. Box 2142, Round Rock, TX 78680

This collection of clipart is also professionally done. The publishers clearly have some experience with clipart for both IBM and Macintosh. The artwork is scanned from original Eykon drawings and comes in compressed IMG bitmapped form. Like the Migraph IMG art they are scanned at 300 dpi. These are the same quality as the Migraph works and are professionally organized. A special flavor of whimsey permeates them that is not quite



what I like in clipart. But, if you want to add a lot of humor to your documents, this is the clipart for you. They have so much art available in so many packages, it is hard to grasp it all. The catalogue they sent me had categories for Education, Humor (medical, educational, religious, & sports), Cartoon Mania (jelly bean, penguin,

dinosaur, & potato mania), Hands, Special Occasions, and previews of even more packages yet to come.

Apparently, this art is available only directly from Eykon. The packages come on one dsdd disk with a 4 inch by 5.25 inch index and a plastic folder to file them in. "...each clip art package includes 25–30 images of the designated category, plus 5 sample images from other categories. Disk price per package is \$54.95 plus \$5 shipping & handling. Hard copies per package (all 8.5 x 11 size) for use with scanners is \$34.95 plus \$5 shipping & handling." (quote from their order form)

IB-Scan*pix*IB Computers, 1519 SW Marlow Avc., Portland, OR 97225

This is a promising bunch of
illustrations from a
the folks who
publish IB Copy,
IB Disk Utility IB,
HD Backup, & the
Analyze spreadsheet program for
the ST. They come
in IMG format and



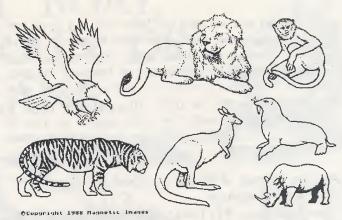
are not quite as nice or as well organized as the preceding packages. For example, the artwork is not original, but scanned from traditional clipart sources. In the DOGS file sample, several dogs are found on the same image and the one you want must be clipped out to use it. This is not quite as convenient as Migraphs' approach that puts only one image in a file, and can waste memory as well, since programs (*Publisher ST* for example) keep the entire original image in the library whether you use all or only a small part of it. Nonetheless, they are less expensive than the Migraph art, and much less expensive than the Eykon art.

IB Scan pix Religions & Holidays package comes on two dsdd disks with over 200 images. List \$39.95. IB Scan pix Pets & Animals package comes on three dsdd disks. List \$39.95. IB Scan pix Illustrations package comes on three dsdd disks. List \$39.95.

Clip Art 1-8

Magnetic Images (formerly The Font Factory), P.O. Box 17422, Phoenix, AZ 85011

This company and their clip art & fonts have been around for almost two years. They had the best art that was available for the ST until the others above got into the race late. I would love to see what they could do with a scanner and IMG format. They also have some 15 fonts available for *Publishering Partner* and (by translating them) *Pagestream*. These graphics will push a 9 wire printer as far as it will go and, amazingly, they were created just for the ST. The earlier copies did not include printouts of the artwork for easy retrieval. My



copy of disk #2 had only a written index of the images on each screen. I understand the more recent copies do include this. Each disk has 5 screens of clipart with 4–8 icons on each screen. They are carefully placed to come off in nice square blocks. This is a nice touch over looked by some others (ie. Howard Enterprises below). Their most recent work with Santa Claus' and drawings of ST & Amiga computers are suitable for newspaper ad copy. Magnetic Images is not up to Eykon, IB, and Migraph above, but they are only asking 20 cents per image compared to \$2 per image with Eykon Computer Graphics. If you are using a nine pin printer and/or print most of your graphics in less than 1 inch by 1 inch size you will probably get a lot of satisfaction out of the whole set.

Disk #1 Computer, Office, Music, School, Travel, Transport ssdd list \$19.95 (each disk same format & price). Disk #2 Business, Sports, Animals, Party, Religious Disk #3 Food, Borders, Old West, Medicine, Newsletter. Disk #4 Hands, Tools, Pirates, Seasons, America, Personal

Disk #5 Theater, Corners, Zoo, Menu, Outdoor. Disk #6 Admans special Full size graphics of computer products from Atari & (retch) Amiga.

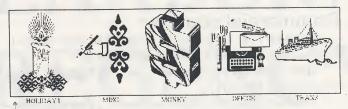
Disk #7 Antiques, Knights, Gambling & Sea Life.

Disk #8 Christmas Art.

'Clip ART #1 & #2

Howard Enterprises (now called Computer Graphics & Printing) 1222 South Dale Mabry suite 920, Tampa, FL 33629

This is a fair set of clip art. So far two disks are available and the artwork on them is only a notch below Magnetic Images. Like Magnetic Images they offer 5 DEGAS format screens with several pieces of art on each screen. Most of the images use the full resolution



Clip Art Disk #1

of the screen and will print out fairly well, but some are so small that by the time you stretch them to a useful size they take on that nasty jaggy appearance. Their themes are not as comprehensive as Magnetic Images, but if you see some particular screenful that suits your uses they are worth the price. The company prints a nice newsletter as well, that may appeal to you. It includes tips for desktop publishing and the latest news on DTP with the ST.

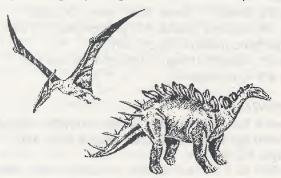
People, Places, & Things Symbols & Slogans Education Graphics

Timeworks, Inc., 444 Lake Cook Road, Deerfield, IL 60015

Now I love Time-works programs, but they scored a major 0 with these clip art collections. The works are of such poor resolution that they just scream "cheap computer print-out." They are roughly



the same low quality as the graphics included free with *Publisher ST.* At \$39.95 a set they are outrageously priced as well. I am at a total loss to explain why a company as good as *Timeworks* with a program as good as *Publisher ST* would want their customer documents to look like they were done on *Printshop.* I did better work carving a potato and dipping it in india ink when I was eight. Please don't encourage these guys by actually spending money on this stuff. There are far better graphics available in the public domain libraries of many users groups, e.g. see the two PD clips below.



Also to Run

You may also want to check out the artwork available from the following sources which for one reason or another were not included above.

Commercial sources:

GEMART # 1. Softworks West, P.O. Box 2846–1, Laguna Hills, CA 92654–2846, Clipmaster 1–?

BRE Software Dept. STI. 352 W. Bedford, Suite 104, Fresno, CA 93711

Printers Devil. c/o Microtyme, P.O.Box 369, Ket-tering, OH 45409

I can't recommend or pan these clipart collections. Perhaps some reader will send in his opinion of them to the letters column. Stay on the lookout yourself. When you see a club newsletter that looks good, ask the editor where the clipart he uses came from. Try one disk or two of a type before you buy a whole set.

Public Domain:

BRE Software Dept. STI, 352 W. Bedford, Suite 104, Fresno, CA 93711.

The King's Domain. P.O.Box 609 H. Graton, CA 95444.

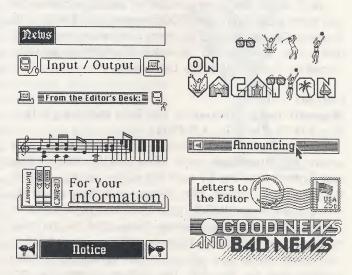
ST Archive (affiliated with ST-Express). P.O.Box 2844, La Habra, CA 90632-2844

Current Notes PD Library. 122 N Johnson Rd.. Sterling, VA 22170. (See sample pictures below from CN #246: Clip Art Disk No. 7)

Genie, Compuserve, PC Pursuit, your local electronic bulletin boards, or any of the telecommunications networks.

Your local Atari Users Group Library.

Now, I can't vouch for all these sources giving you publication quality artwork, but I can assure you they will be cheaper than the commercial art I reviewed. I have found out that while you usually get what you pay for, if you really search you can glean some nice stuff from the public domain area. The price is time & effort. You may look for weeks to find a nice screen or two (this stuff is all in DEGAS format so far) and when you get it you will have to either print it out and catalogue it yourself or spend more time looking for it in your collection than using it. I used this art quite a bit before the release of Migraph's packages, but use it less and less now. Since I already have my basic software (paint, word processing & desktop publishing programs) I have more money to spend on these supporting purchases.



HEADINGS.PI3 from CN #246: CLIP ART No. 7

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ATARI ST/MEGA CN REVIEW

WRITING BETTER SPREADSHEETS

By Pamela Rice Hahn

There are now a number of spreadsheet programs available worthy of the power of the ST--VIP, LDW, SHEET,... The uses of spreadsheets are just as varied. One member of our local user group (MVACE) is completing work on his doctorate by creating military simulations within a spreadsheet environment. Perhaps your uses are limited to the more mundane expense tracking or tax completion or as extensive as tracking your national sales distribution, managing your inventory, and preparing profit and loss statements any Fortune 500 company would envy. Whatever your needs, chances are there is a book that will assist you in better harnessing the "what-if?" possibilities you are pursuing. This month we'll take a look at five such books.

The Best Book of: Lotus 1-2-3

[Alan Simpson, Howard W. Sams & Co., 4300 West 62nd St, Indianapolis, IN 46268. Glossary. Index. 336 pp. \$19.95)

Written specifically for Release 2.0, this book assumes no previous computer and/or spreadsheet experience. Divided into four main sections, Simpson's books progressively covers 1–2–3's worksheets, graphics, database management, and macros.

Because the book is written for the novice, Mr. Simpson first explains a topic before proceeding with a practical application using that topic. For example, in the first section there is a lengthy discussion of the various functions and their definitions followed by sample worksheets using those functions. Each chapter then ends with a guiz.

Those not wanting to type in all the example worksheets can order a 5 1/4" IBM ds/dd disk by sending a check or money order for \$30.00 to: SMS Software, P.O. Box 2802, La Jolla, CA 92038–2802.

The Hidden Power of Lotus 1-2-3

[Richard W. Ridington, Jr. and Mark M. Williams, Brady, Prentice Hall Trade, New York. Index., 283 pp., \$39.95.)

Now that you've mastered your Lotus 1–2–3 Release 1A– or 2–compatible spreadsheet program and are ready to learn how to use it more effectively, you're probably going to want this book–disk set. The Hidden Power of Lotus 1–2–3 has 350 macros and subroutines to assist you in customizing your spread–sheets. The disk contains the macros; the book is the tutorial and contains the explanations necessary for

you to utilize or modify the macros included.

The only concession Ridington and Williams make to the novice is they assume no prior knowledge of macros. As such, they include both the examples and explanations necessary to instruct on the usage of macros to automate and customize 1–2–3-type operations.

I like the authors' style in presenting the material in this book. For example, Chapter 1—The Access System, begins with an explanation of the benefits of macros and proceeds through an introduction to the makeup of a macro and the advantage of macro usage. Chapter 2 covers (an 80-page explanation of) macro basics. Subsequent chapters show how to control the screen appearance during macro execution, design menus, improve worksheet performance, include full error trapping as well as screen prompts within your macros, set up a personal address manager system and then print your mailing labels from within that system, and other explanations on the large variety of useful macro enhancements included on the disk.

The Elements of Spreadsheet Style

[John M. Nevison, Brady, Prentice Hall Press, New York. 197 pp. Index., \$12.95.]

Most writers are familiar with E. B. White's The Elements of Style, the book Nevison cites as his inspiration for writing this book. In it, White wrote his version of how to write clear English. Nevison has written a book on how to write clear spreadsheets. Made up of twenty—two rules designed to encourage an expected standard of performance, The Elements of Spreadsheet Style is intended to improve the spreadsheet developer's expression. Because using a spreadsheet program doesn't automatically make one a good analyst any more than a word processing program can make one an author, Nevison wrote this book to stress the importance of developing clear and well structured spreadsheet design.

This book is not a beginner's tutorial. A prior knowledge of spreadsheet program usage is assumed. From there, Nevison explains the process of enhancing your professional productivity through forming good spreadsheet construction habits. He includes examples showing weak and strong versions of the ideas in practice.

Nevison begins the first chapter by saying, "A spreadsheet should be of good character. It should be

CN REVIEW ATARI ST/MEGA

straightforward to build, easy to read, simple to use, receptive to change, and, above all, free of error." He then proceeds to tell you how to accomplish just that.

Applied 1-2-3: Creating Spreadsheet Systems for Others

[Tim K. Nguyen and Joseph R. Little, Brady, Prentice Hall Press, New York. 378 pages, Index., \$19.95]

As the title implies, this book is about designing spreadsheets using sound 1–2–3 programming principles. Intended for Release(s) 1A, 2.0, or 2.01, the authors assume the reader has no prior programming experience. While the book is written in layman's terms, they do assume the reader is already familiar with 1–2–3's command structures.

Applied 1-2-3 walks the reader through the complete development of an application creation project, beginning with explanations of why and when to use 1-2-3, its limitations (i.e. "If your task requires searching, sorting, and reporting on thousands of alphanumeric records..., investigate one of the microcomputer databases..."), buying into 1-2-3, through the need, concept, principles, and design criteria for a well-designed system in 1-2-3, the myriad of phases in the application's development, techniques for building applications, alpha and beta testing, twenties pages on preparing the necessary documentation, and a discussion on training those who will use your application. Those using Lotus on an IBM or within PC-DITTO may be interested in Chapter 8's 68-page explanation of HAL, 1-2-3's English language interface. Finally, the entrepreneurial adventurous, or curious, will find Appendix B, "Tips and Techniques for the Independent Consultant," of special interest.

Business Decision Making with Lotus 1-2-3 [James I. Cash, Jr., McGraw-Hill. 160 pps, Index, \$24.95]

The author, Dr. Cash, is a Harvard Business School middle management executive course professor and business consultant. Thus, in some aspects, this book is the more advanced of those mentioned here.

This book is only a primer in the sense that it covers financial decision-making techniques using 1-2-3. All examples given in the book (and reprinted in the appendixes) are for use with Release 1A.

The book is intended to introduce the principles of management science and the aspects of quantitative and technology-based decision-making methods within a computer-based environment. In other words, using a series of mini-business cases, use of 1–2–3 as an analytic tool is detailed.

While the book is obviously not light reading, Dr. Cash's presentation is in a very readable format. Chapters cover computer-aided decision-making process for semistructured problems, model building, deterministic analysis, sensitivity and probabilistic analysis, and report generation.

Most spreadsheet programs are based on a **Lotus 1–2–3** style or standard. That would be more appropriately stated as standard(s). Thus, it is important that you know the **standard** on which your program is based, i.e. Release 1A, Release 2.0, etc. I've indicated which versions are covered by the books I've mentioned this month. Usually a quick glance at the book's back cover or introduction will indicate which versions that particular manual explains.

New! Numerical Recipes for the ST

"Numerical Recipes: The Art of Scientific Computing" is a classic 600-page book from Cambridge University Press. It contains over 200 subroutines that address many aspects of scientific computing, and detailed discussions about their operation. The subroutines have been a popular resource on IBM/PC and Macintosh personal computers, and on many types of workstations and multiuser mainframe computers, for over two years. They are now available in FORTRAN-77, Pascal, or C for the Atari ST on 3-1/2-inch diskette. The software is distributed as source code, modifiable for individual applications. Using these subroutines, you can:

- Integrate Functions
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- Interpolate and Extrapolate Data
- Perform Fast Fourier Transforms
- Minimize or Maximize Functions
- Generate Special Functions
- Perform Statistical Analyses
- Integrate Differential Equations
- and much more!

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Numerical Recipes Software, P.O. Box 243, Cambridge, MA 02238

for details. Also available: Numerical Recipes Example Diskettes in FORTRAN-77, Pascal, or C to accompany the "Numerical Recipes Examples Books".

Recipes Diskette: \$39, Examples Diskette: \$29. ppd. (Please specify language.)

WINTER CHALLENGE

Peruvian Connection III

by Augusto Rojo

(What follows is a condensed. rewritten version of Senor Rojo's review. The American version of this game is called WINTER CHAL-LENGE. It is published by Thunder Mountain software, but is not available for the XE/XL machines. Originally, however, it was to be produced for the Atari 8-bits. Since EPYX'S WINTER GAMES also is unavailable for our computers, the only way to play winter games is to acquire the European version, as described below. Another possibility is to write Thunder Mountain and try to convince them to release the Atari version. -- LP)

WINTER OLYMPIAD 88 is a better version of Tynesoft's WIN-TER OLYMPICS. This is best as a multi-player game because making lower times and better scores is more of a challenge with live opponents.

The game comes on two, double-sided disks. Similar to EPYX's SUMMER GAMES, this program includes an attractive opening screen, a board for players' names, and the ability for each player to select a specific country to represent.

The first game is downhill skiing. Your perspective is behind the skier. You must avoid pine trees and jump over tree trunks. This is a very difficult event because avoiding the obstacles is hard, and you have only one life.

Ski jumping follows. Again, the view is from behind the skier. First, you descend the ramp; then the screen changes to a side view which scrolls. The distance of your jump depends on your position in the air. As you descend, you need to maintain your skis in parallel order, or you will roll in the snow.

You have three chances to complete this course.

Biathlon is very similar to the same event on EPYX's WINTER GAMES. It is an exercise for your fingers and joystick, with an occasional halt to take a few shots at targets. If you miss some shots, your time to complete the course is increased, and you have a lower score. This event has the most beautiful backgrounds.

The slalom event begins in front of a very attractive graphic of a brick hut. From there, you head downhill as you attempt to maneuver between sets of colored flags. Unfortunately, this game contains a

PAL bug. If you don't go between the flags, the top part of the screen is changed to undefined characters.

In the bobsled event, you are given two views: a map of your route and a view from the rear as you race through the track. One weakness is that your position on the map doesn't always correspond to the curves you are hitting on the close—up screen.

The strong parts of the game are the game play and the graphics. Weaknesses include the amount of disk swapping required and some sloppy programming at times (e.g., the bobsled map has no blinking point to show you where you are) that suggests that this game is not truly finished.

In the balance, I think that this game is a good choice for 8-bit users who like the winter games.

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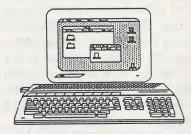
Written by David Small, the creator of the Magic Sac™

COMPATIBILITY:

- 128K ROM compatible! With the 128K ROMs installed, Spectre can run new Mac software such as HyperCard™, Adobe Illustrator™, and PageMaker™, plus all of the older Mac software.
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MIDI on the ST



by Lee Whitman

My name is Lee Whitman and I will be bringing you some MIDI columns for the next several months if time permits and the response is favorable. As a music store owner and Atari dealer, I am constantly working with computers and music. We customize systems for people whether they be IBM, Atari, Mac, C-64 or Apple. In the future I will bring you in depth comparisons of software and MIDI hardware while trying to live up to the Current Notes reputation of "telling it like it is."

In this month's column I will take a look at *Sonus Superscore* and also cover some of the more interesting developments seen at "COMDEX" last week.

Sonus Superscore

Superscore is the most complete sequencing-scoring package available for under \$500. With a retail price of only \$299, SUPER-SCORE offers one of the few integrated packages on the market at any price. When we say integrated we mean that you get the sequencer and the scoring software in the same box for one price, although the files are transferable from other software and directly compatible with SONUS' SST and Masterpiece.

System requirements are 1 Meg of memory and a monochrome monitor. The program will not run on

SONUS SUPERSCORE

A Sequencing and Scoring Software Package by Mike Williams and Jim Sproul

a 520 at this time although its creator says that it can be broken into two parts with some work. (Maybe if enough people request this it will come to pass.) You can run the program on a color monitor and the record part works fine; but the scoring part does not look right in medium resolution and I've been told it bombs sometimes in color. If you do not have a mono monitor, I recommend you buy one as the best investment you can make for the ST. Obviously, Macintosh requires it, not to mention all the DTP and CAD programs.

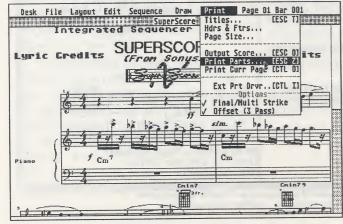
SEQUENCER MODE. Superscore has a 32 track recorder with locations for 24 sequences and the tracks can be clicked on and moved to the sequences buffer as an alternate storage to the "tracorder" note-pad buffer. The program uses standard music notation for editing the sequence's notes, instead of "piano roll" or "text" type note editors. This is considerably more efficient for anyone who reads music and is concerned about the accuracy of the final score. There is a TAB step-through bar that lets you 'see' the notes as they are played. The software is totally GEM based so it is very easy to use. The IBM folks come in and see it running and you have to tell them that it's

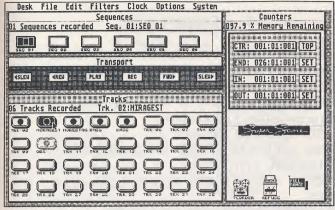
not available for MS-DOS and the closest thing to it is *FINALE* or *SCORE* at only \$995.

Recording is very easy: just click on the record icon and recording starts as soon as you play, unless you ask for a countdown. Hit the spacebar to stop, and then hit the spacebar again to play. All the normal track select, name track, midi channel, tempo, meter, transpose, quantize, etc. functions are available in the drop-down boxes and have alternate keystroke commands. Midi through for the ST is available as long as the transport is running and the track split function is the easiest to use I have found on any machine. To record additional tracks, just click on the new track icon and hit record. The channelization is set automatically from the sending unit and can be changed with four ports available.

SCORE MODE. Switching to the score mode is as easy as clicking on SW and then three "default no" options are answered before the first page is automatically displayed. 32 staves can be displayed per page in three resolutions with six being displayed at a time in the small size. Six different GDOS fonts are available in up to 36 point sizes along with italics, outline and bold. Four or five palettes of musical symbols come in three sizes along with freehand, hairpins, and a library of guitar chord symbols. There is also a title page and the ability to enter notes with the mouse or just edit them. All dynamic changes in the score along with the added notes are simultaneously entered into the sequence so it's a good idea to save the sequence before you go into the score mode. The score takes about three times as much memory as the sequence, or 16 bytes average per note.

The score output is fast to the dot matrix printer in regular mode and slow in three times overstrike mode. Laser printer support is supposed to be available soon, along





with an easier facility to print out individual parts; version 1.4 is currently shipping while 1.2 came out last June. Print quality on dot matrix is acceptable but not outstanding. The palette is of the largest available for any computer but the beams and ties still have the jaggs. Notes can be entered with the mouse pointer quite easily and moved in any direction for accuracy.

Since Mike Williams, the creator of the program, is a church organist and real musician, he has set up the program to maintain a musically correct score. For example, if you enter an eighth note in the middle of a quarter rest, the rest will turn into an eighth rest. Also, unlike some programs, you can immediately hear the results in either step or real time.

SUMMARY. Considering the other choices and their price, along with the integration that SUPER–SCORE offers, it rates a best buy for me. Where else are you going to get full–featured 36 stave sequencing and scoring for less than \$300.00 list price????? [P.S. Check this month's new CN Library disks for a working demo of the Superscore software.]

COMDEX SPRING 89

This was my first COMDEX, although I have been to a number of NAMM shows. Some of the more interesting and entertaining features I found about the show were the three card-magic shows that I watched and the dozen or so skits performed by the professional actors. All three card sharks were excellent so I could not rate a "first prize" there, but WANG was the

winner in demonstrating a product through acting out a real situation. They showed some software on a Macintosh-type screen with a variety of pop-ups in icon form. What stood out was the integration of the peripheral hard-

ware and software. The skit featured a 'Bank President' using a dedicated "WANG" telephone to dictate to the computer and have his secretary later produce a document from the dictation. The voice was still available later to verify the document. Of course, the FAX was hooked up along with the scanner to send docs to the client. If I were a bank president, I would order one today.

Hewlett Packard danced and sang and gave me a free HP wrist—watch direct from Taiwan. I forgot what they said except buy HP, and that the new Desk Jet II is twice as fast as the old one at the same price and it will do landscapes.

IBM had 40 or so big screen moniters stacked up 12' high and a rather impressive display of OS2 or ASI or RT or SIA along with token ring and a touch of Rendering. If you get a chance to pick up a copy of the animation video called "TIN TOY," it will blow your mind to see this film which uses wire frame models of a doll that moves around chasing a toy soldier that is real. When the doll moves, the shadows and glare from the light follow it with such realism that you would have thought it was recorded with a video camera using puppets. I'll save more on this for later columns.

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PLANE

Nothing more than a small, white airplane against a blue background. Consider it a very small miracle.

10 SETCOLOR 2,0,0

20 X=130:Y=70

30 A=PEEK(106)-8:POKE 54279,A:PBASE=256*A

40 POKE 559.46

50 POKE 53277,3

60 POKE 53248.X

70 FOR J=PBASE+512 TO PBASE+640:POKE J,0

75 NEXT J

80 POKE 704,88

90 FOR J=PBASE+512+Y TO PBASE+520+Y:READ

A:POKE J,A:NEXT J

100 DATA 8,24,49,51,255,48,48,24,8

110 A=STICK(0)

120 IF A=15 THEN 110

130 IF A=11 THEN X=X-1:POKE 53248,X

140 IF A=7 THEN X=X+1:POKE 53248,X

150 IF A=13 THEN FOR J=10 TO 0 STEP -1:POKE PBASE+512+Y+J,PEEK(PBASE+511+Y+J):NEXT J:Y=Y+1

160 IF A=14 THEN FOR J=0 TO 10:POKE

PBASE+511+Y+J,PEEK(PBASE+512+Y+J):NEXT J:Y=Y-1

170 GOTO 110

PRETTY

A web-like design expands into a gorgeous threedimensional, multi-colored form.

10 DEG

20 GRAPHICS 24

30 COLOR 1

40 SETCOLOR 2,0,0

50 FOR I=1 TO 360 STEP 5

60 X=319*I/360

70 Y=80+80*SIN(I)

80 IF I>270 THEN 100

90 PLOT 0.0

100 DRAWTO X,Y

110 IF I<90 THEN 130

120 DRAWTO 319,159

130 NEXT I

140 IF PEEK(764)<>255 THEN END

150 GOTO 140

BASSNOTE

This bassnote tutorial, written by Jerry White, first appeared in ANALOG. Using the theme from BARNEY MILLER, the programmer showcases one specific aspect of the Atari's musical ability. A listing of which note is playing is particularly informative.

20 GOSUB 600:GOSUB 250:GOTO 105

40 SOUND 0,0,0,0:READ PITCH:D=12:V=14:SETCOLOR

2,PITCH,0:SOUND 0,PITCH,D,V

42 POSITION 10,20:? " SOUND 0,",PITCH;",";D;",";V;"

":RETURN

50 FOR HOLD=1 TO 200:NEXT HOLD:SOUND

0,0,0,0:PITCH=0:D=0:V=0:GOSUB 42:RETURN

70 FOR HOLD=1 TO 50:NEXT HOLD:RETURN

80 FOR HOLD=1 TO 25:NEXT HOLD:SOUND 0,0,0,0:RETURN

100 DATA 102,90,85,82,75,72,67,67,60,57,60,67,75,67,51,60,75,90

105 FOR TIME=1 TO 2:GOSUB 40:GOSUB 50:GOSUB 50

110 GOSUB 40:GOSUB 70:GOSUB 40:GOSUB 70

120 GOSUB 40:GOSUB 50:GOSUB 50

130 GOSUB 40:GOSUB 70:GOSUB 40:GOSUB 70

140 GOSUB 40:GOSUB 50:GOSUB 50

150 FOR QUARTERNOTE=1 TO 8:GOSUB 40:GOSUB

70:NEXT QUARTERNOTE

190 GOSUB 40:GOSUB 80:GOSUB 40:GOSUB 80

200 GOSUB 40:GOSUB 80:RESTORE :NEXT TIME

220 RESTORE :GOSUB 40:GOSUB 50:POKE 752,0:? " PRESS

OPTION TO RERUN":? " PRESS START FOR MENU";

230 IF PEEK(53279)=3 THEN RUN

235 IF PEEK(53279)<>6 THEN 230

240 ? CHR\$(125):? :? "LOADING MENU";:RUN "D:MENU"

250 ? :? ," PITCH = NOTE":GOSUB 700

300 ? :? "25=E","27=D#","28=D ","30=C#"

310 ? "31=C ","33=B ","36=A#","37=A "

320 ? "40=G#","42=G ","45=F#","48=F "

330 ? "51=E ","55=D#","57=D ","60=C#"

340 ? "63=C ","67=B ","72=A#","75=A "

350 ? "82=G#","85=G ","90=F#","97=F "

360 ? "102=E":GOSUB 700

380 ? :? " THE ATARI BASIC SOUND COMMAND:"

400 ? :? "SOUND VOICE,PITCH,DISTOR-

TION, VOLUME": GOSUB 700: RETURN

600 GRAPHICS 0:POKE 752,1:GOSUB 700:? " THE THEME

FROM BARNEY MILLER"

620 ? :? "BASSNOTES USING SOUND DISTORTION

12":GOSUB 700:RETURN

700 FOR CTRLR=2 TO 36:? CHR\$(18);:NEXT

CTRLR:RETURN

790 REM ********************

800 REM * D=DISTORTION V=VOLUME *

810 REM * GOSUB 50 FOR WHOLE NOTE *

820 REM * GOSUB 70 FOR QUARTER NOTE *

830 REM * GOSUB 80 FOR EIGHTH NOTE *

840 REM * GOSUB 700 TO DRAW A LINE *

850 REM ************************

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THE 7800 GAME CART by Len Poggiali

The Atari 7800 PROSYSTEM is a sleek, little number which comes packaged with two joysticks and a *Pole Position II* cartridge. Hooking the system up is slightly different than the method used in connecting a 2600, but it is no more difficult. You might have to make a visit to your local Radio Shack, however, to purchase a cable connector or some such accessory. Hopefully, that will not be a problem.

Four buttons are placed conveniently on the top of the machine: Power, Pause (some 7800 carts use this feature), Select, and Reset. The A-B Difficulty switches are positioned on the front. None of the 7800 carts I have previewed employ these switches, but many compatible 2600 programs do.

The two joysticks also are connected in the front. This is a pleasant departure from the standard rear placement on the 2600, a positioning which I found less convenient. The sticks themselves are the slick, narrow, two-button types which suggest more sensitive control than the standard model. Gripping them is easier, but muscle cramps set in more quickly. For some games I prefer this type of stick. With others (e.g., Ms Pac-Man), there is just too much play.

Although all Atari 2600 carts apparently are compatible, some third-party products (including my copy of Tigervision's *Miner 2049ei*) will not fit in the cartridge slot. Some of Activision's are advertised as being incompatible, but my *Pitfall* and *Private Eye* work fine.

Pole Position II

The *Pole Position II* cart included is the best driving game Atari has ever produced. Containing all the features of the classic *Pole Position*, the new version goes a good deal further. Instead of one basic scenery background, *Pole Position II* offers four distinct locations and dramatically different courses.

The Egyptian desert (pyramids and all) is the site of the test course. This provides an easy introduction to the game; it may be completed by video driving novices of all types. Near Japan's snow-capped Mt. Fuji, players will encounter a slightly more difficult challenge. Obstacles include billboards, puddles, and other autos. By the seaside, drivers will experience an intermediate quest, and, in the midst of a carnival, they will find the most difficult option of all.

While repetitious, the background graphics are clearly delineated, attractive, and colorful. The vehicles, the road, and various obstacles are as well drawn as in the first *Pole Position* (which is saying a lot), and the animation for all game elements is smooth and

reasonably realistic. The best effect (graphically and sound-wise) occurs when your car crashes. The sound and sight of the explosion is arcade quality.

Joystick control is excellent. Whether in low gear (pull stick back), high gear (push stick forward), maneuvering left or right (moving stick in the appropriate direction), accelerating (pressing left button), or braking (pressing right button), the driver has total command. Naturally, in more difficult courses, it takes more than control to win the race. Iron nerves and the willingness to risk it all count for something as well.

The goal is the same as before. Before competing in the race, the player must qualify for one of eight starting positions. To do so, he must complete the qualifying heat in 73 seconds or less. If the qualifier can beat all of the seven computer–driven cars, then the pole position is his.

The race consists of five laps. In order to complete all of the laps, one must finish each in a certain amount of time. If that happens, then the player will be allowed to continue into the next lap and so on. If not, then the race is over. Points are awarded for each lap completed, each car passed, each second of time left on the clock when the race is finished, and for the qualifying time.

My favorite feature of *Pole Position II* is that you cannot get killed no matter what you do. Your car crashes and explodes, and time is lost, but you stay alive and receive another car. Not a bad deal, eh?

One-On-One Basketball

While most systems are coming out with the new *Jordan vs. Bird* game, Atari's newest version of the "Dr.J"—Larry Bird competition is far from ground breaking. Nevertheless, for 7800 owners, it is the only decent basketball game available.

Faithful to the 8-bit version, the 7800 *One-on-One* offers the following features: four different levels of play; slow motion and instant replay features; a two-player game, or the option to be either star against the computer; a timed game of varying lengths, or playing to a set score; the ability to shatter the backboard, and to have the glass swept up by the comical maintenance man; and the option to resume a game in progress or watch the computer play itself.

The offensive player may dribble, spin 180 degrees, shoot from a number of positions, and make the three–point shot. Defensive movements include blocking shots and stealing. Travelling, charging, and failing to shoot before the shot clock reaches zero are illegal offensive moves. Reaching in, blocking, and hitting the offensive player are among the illegal actions for the defense. A fouled player goes to the free–throw line for one or two free throws, depending upon the circumstances.

As half-court, one-on-one computer games go, this one is a classic. A real plus is the individualization of the two players. Dr.J is quicker and fancier, while Bird is bigger and stronger. Because of his speed and finesse, I tend to have a harder time with the "Doc." At higher levels, I don't have a chance with either player.

Although an enormous amount of fun to play, *One-on-One* is showing its age (circa 1983). The graphics are fuzzy; sound is 2600 quality; and many of the movements both legal and illegal are impossible to distinguish.

Until something better comes along, however, *One-on-One* is worth the price for basketball devotees looking for a reasonably impressive challenge.

HAPPY'S PROGRAMS - MATH Review by Len Poggiali

Happy's Programs—Math (HPM) was designed by Matt Bensley who, along with his brother Brett, operates Bensley Consulting, a small, independent company that does computer consulting and produces educational software packages. The brothers have published nine programs for the Apple II and currently are at work on their third Atari program—Happy's Programs—U.S. History.

HPM consists of four modules: addition, subtraction, multiplication, and division. By its very nature, HPM is geared toward grade school children. Therefore, it is important that the program be as user friendly as possible. For the most part, HPM meets this challenge.

After booting the disk, the child will make his choice from the Main Menu. If one of the first three is picked, a prompt will ask how many digits up to a maximum of four or five the user wishes the problem to contain. For addition, it also is necessary to type in the number of lines the problems should be (from two to nine). Before doing division, the prompt will require that the difficulty level (from one to four) be keyed in.

After the choice is made, the module selected is loaded in. An example showing all work is presented. Whenever the child wishes to view another example, he may do so by pressing the E key. If he wants to begin tackling problems, he merely presses the RETURN key, and one will appear. Although the use of the RETURN key is explained in the on-screen directions earlier, it is unfortunate that there is no screen prompt on the problem screen relating to the use of this key.

Digits are entered from right to left, and entries may be changed by using the DELETE/BACKSPACE key. In the multiplication mod, the child has the choice

of entering the answer or showing all the work. The "Show Work" toggle might be a bit confusing for the youngster; it was for me.

After the RETURN key is pressed, the program signals whether the answer is right or wrong. Correct answers are rewarded in the form of a rocket ship taking off. If the wrong answer is given, the program shows the correct answer and work (e.g., carrying) in inverse above or next to the user's answer.

In addition to the problem, the screen displays the number of problems tackled, the number correct, and the percentage correct. After quitting HPM, the child will be given the final tally of problems tried, and the percentage and number of correct answers.

HPM is not a fancy, bells-and-whistles-type program. Its purpose is to reinforce basic math concepts by providing problems of varying complexities, by reinforcing correct answers, by giving examples, and by explaining how to correct incorrect work. If that is the sort of thing you are looking for for your child, then HPM could very well fit the bill.

(Bensley Consulting, P.O. Box 301, Westfield, IL 62474. Send \$19.95 plus \$2.40 for shipping and handling.

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ATARI EXPOS: DETROIT, MI and ANAHEIM, CA

ATARI EXPO IN DETROIT They Came. They Saw. They Enjoyed! By Earl Hill

A computer show is a great opportunity for the general public to see exactly what Atari computers can do for them. It's also a terrific opportunity for computer veterans to meet developers and vendors who produce and sell the fantastic products which make Atari com-

puters so versatile and powerful.

The MACE (Michigan Atari Computer Enthusiasts) group has helped this process along this year by putting together the Atari show held at the Detroit Airport Hilton on May 6 and 7 in Romulus, Michigan. The show was made up of both user groups and vendors. As you entered the show entrance at the hotel, after buying your ticket (which was good for both days), you were greeted by the various user groups participating in the fair. First in line was SAGE, Spectrum Atari Group/Erie, this correspondent's club. You were then met by several extremely attractive greeters from Rite Way Computers, Warren, MI. You had your choice of visiting all the user groups in a long hallway, or going into the show proper.

Everything You Wanted

If you checked out the user groups, you had a total of 10. One group from Pennsylvania; two from Canada; six from Michigan; and one from Ohio. Each group offered a wide selection of 8 and/or 16–Bit PD software disks, T–shirts and much more.

After depositing your door prize tickets, the next step was to check out all the vendors. There were nearly 30 exhibitors with most everything you would ever desire for your Atari computer. What would you want? Games, 1040ST's, Mega ST's, disk drives, word processors, color printers, books—everything was available for the Atari enthusiasts. It was all there, and the price was right!

The vendors/exhibitors were: Scorpion/Microdaft, Hurricane Systems, Electronical Software, Rite Way, SofTrek, Gribnif Software, Alpha Systems, Joppa Computer Products, CompuWorld, Innovative Concepts, ICD, Nice & Software, CodeHead, Atari, MichTron, AccuStar, DataFree, Basic Bits 'n' Bytes, DataQue, Cal Com, WordPerfect, Sector One, Index Legalis, ST Informer, Unicorn Publications, and Mars Merchandising.

The show was literally a bee-hive of activity from opening to closing time. Of the two show days, Saturday was the busiest, but total sales appeared to be about the same both days. Despite the crowd, it wasn't difficult to find your way around the show. However, sometimes it was hard to get a "front seat" at a vendor's booth due to heavy buying activity.

Atari's booth was essentially informational. They were represented by Robin Noonan, Cindy Claveran's replacement, and a distributor out of the state of Indiana. This booth only had a limited amount of equipment on display. Guess we will have to wait for the Detroit World of Atari show for the real goodies!

There were programs, books and diskette holders donated by various suppliers and exhibitors to be given away as door prizes. Also, Rite Way donated a T-shirt to be given away every hour. All this certainly helped build up the excitement of the fair. What a chance to win something like *HardBalll*, *Spitfire 40, Gold of the Realm*, *VDOS ProQue*, *Orbitor*, *Off Shore Warrior*, *Galactic Conqueror* or *Falcon!*

CodeHead Stood Out

At the booths, there were more things going on than could possibly be covered in a short report such as this. I can only mention a few things in brief. It seemed CodeHead Software's booth was always busy. Everyone wanted to talk to the two CodeHead superdevelopers. Besides *G+PLUS*, *MultiDesk*, *HotWire*, and *MIDIMAX*, all stand-you-on-your-ear products, they are working on *FatBack*, a hard drive backup utility, and two disks of CodeHead Utilities. Gribnif was selling their newest version of *NeoDesk* with custom file icons. Rick Flashman talked at one of the seminars where he gave an in-depth look at all its features.

MichTron filled two booths with their products. Everything from their newest games, to utilities, to books, to their newest application programs.

ICD showed their FA-ST line of hard drives for the ST. Their newest units are case, power supply, host adapter, with or without a controller. You buy your own hard drive. ICD also had their tape backup unit on display. They also had the new *SpartaDOS-X* for the 8-Bit systems. The ICD representative said their Atari sales are showing considerable strength with an upward sales curve. Lets hope this continues because ICD is one company that has really gone all out to support the Atari line.

The largest dealers at the show in booth size were Joppa, Cal Com and Rite Way. These all had very busy booths, showing that there is a lot of support for the Atari in the Detroit area.

Special interest items at the show were the Tweety Board for the ST, the ST magazines from Europe, *Diamond* (the GEM-like interface for the 8-Bits), RAM expanders for the ST, and Turbo-816 for the 8-Bits. Although only one product was available at the show, there was quite a bit of interest shown in general in accelerator boards. DataFree from Canada had a 16 MHZ board (with an external toggle switch) which offers an average speed increase of about 30%. Installation

requires soldering. It does not have a RAM cache, as these have been reported to cause incompatibility with some programs.

A new tidbit on the TOS 1.4 is that the absolute latest will be called the "Rainbow." This is because it shows a rainbow when you click on the Desktop file. If you don't see it—then you ain't got it!

Seminars Stole The Show

The highlights of the show for both days were the seminars. Here was a chance to hear and ask questions of such people as Mike Groh, Darek Mihocka, Bob Puff, Jeff Williams, Tom Harker and Charles Johnson. Space restrictions limit discussion of the talks in detail, but here is a listing of them all:

- George Miller (MichTron) gave a demonstration of Fleet Street Publisher.
- □ Gordon Mella (WordPerfect Corp.) demonstrated *WordPerfect*, the premier word processor for the ST.
- □ Rick Flashman (Gribnif) showed off the latest version of *NeoDesk*, the alternate ST Desktop.
- An informative and detailed discussion of the ins and outs of hard drives from Tom Harker of ICD.
- □ Bob Puff (author of MYDOS, DiskComm, SuperArc and BobTerm) and Jeff Williams (AlfCrunch author) "The Atari 8–Bit Shareware market."
- Discussion of "User Groups and What They Can Do For You" by officers of local Atari clubs and Keith Johns, CompuServe Sysop.
- Mark Elliott of Innovative Concepts talked about 8– Bit products.
- Ed Hanson (Hurricane Systems) discussed hard drive alternatives for the ST.
- DataQue's Chuck Steinman showed off the Turbo-816 hardware upgrade for Atari 8-Bit computers.
- Mike Groh, Atari's MIDI Rep., discussed the MIDI industry and Atari's place in it. In a second talk, he discussed using the ST for Music Publishing.
- Darek Mihocka debuted the final release of ST Xformer, the famous Atari 8-Bit emulator for the ST.
- A look at speeding up your ST with *Turbo ST* from SofTrek's Wayne Buckholdt.
- Discussion of the Shareware Software Market by Charles Johnson and John Eidsvoog (CodeHead) and George Morrison (Alpha Systems).

Nearly everyone I talked to rated the show as a success in terms of both sales, attendance, and enjoyment. This was a show for user groups and vendors. There were a lot of PD disks sold and a lot of both "little-ticket" and "big-ticket" items moved out the door. The atmosphere was strictly upbeat all the way. The mood of excitement held right up to the end when the Atari 520STFM, the grand door prize donated by

Rite Way, was won by a person from Toledo.

No one, who hasn't been involved, knows just how much work is actually needed to put on a show such as this. The amount of pure physical work is unbelievable. The planning and brain-storming that precedes it cannot be described. The MACE people, their volunteers, and their special helpers all deserve a big pat on the back for their efforts.

And now let's buy the advance tickets for the Detroit ST World Atari Show in June....

ATARI and DISNEYLAND

Highlights: Midi Music, Portfolio, Mega 44, STacey, Spectre GCR, and pc-ditto II by Ron Ariel

WORLD OF ATARI, a trade exhibition jointly sponsored by Atari and ST WORLD, opened on April 21 at the Disneyland Hotel, in Anaheim, California. The hotel's Convention Center hosted 49 exhibitors, seven conferences and an evening rock music program spotlighting the STACY laptop and the "Holtz Instrument" musical accessory.

The exhibitors included dealers, software vendors and user groups representing a wide range of applications. WORLD OF ATARI gave visitors a chance to see demonstrations of software normally only available through mail order.

Atari introduced several new packages: a high-end desktop publishing system with a Mega 4 ST, a 30-MB drive and laser printer for under \$4,000.00. The STACY is a 15-lb laptop computer functionally identical to the 1040ST. Also available is the Portfolio, described in press releases as a pocket-sized "IBM-compatible" PC. For under \$400, one can buy a machine sporting word processing, a Lotus-compatible spreadsheet, a personal calender and phone directory. Its operating system is compatible with MS-DOS 2.11.

Among new software and accessory additions was Spectre GCR, sold by Colorado-based Gadgets-By-Small. The Spectre, which retails for \$300.00, allows STs to read and write to Macintosh-formatted disks.

Trade show organizers could not provide estimates of how many people attended on Saturday, but one remarked "The fire marshal almost closed us up this morning. We had over 4,000 people in the room, and that's close to the fire code."

It was easy to tell who was having the most fun. The Grove School of Music opened a booth at WORLD OF ATARI. The school offers training to composers in music composing and performing on Atari computers and computer-controlled keyboards such as the Synclavier. With all the keyboards out in the showroom, the musicians clearly enjoyed themselves the most.

AtariFest '89

Comdex For The Common Man

by John Barnes, WAACE Chairman

East Coast Atarians don't have to travel to Chicago, Atlanta, Las Vegas, or even Anaheim because they can get the straight scoop on the latest Atari doings right here in the "seat of government." AtariFest '89 is scheduled for October 7th and 8th at Fairfax HS. The event is sponsored by the Washington Area Atari Computer Enthusiasts and the Adult Education program of the Fairfax County Public Schools. Admission is free and the Fest is open to the public.

Since its humble beginnings in a hallway at Fairfax High School in the fall of 1985, the WAACE Atari-Fest has grown to become the premier East Coast event for Atari users. The 1988 Fest drew people from 26 states and a couple of foreign countries.

Something for Everyone

The fact that nearly 3,000 people attended the 1988 Fest is a clear indication that WAACE is providing something people want. The WAACE member clubs, who cover the ground from Baltimore to Richmond, put a lot of effort into providing a varied and interesting experience. There is something for the inveterate shopper, the serious hacker, and the bewildered user interested in learning more about his or her Atari.

Hardware and software from all over the Atari computing world will be on display and, in most cases, on sale. Leading retail outlets and software developers will be represented. The educational side of the program will feature seminars,

demonstration rooms, and a desktop publishing contest. Subjects covered will include desktop publishing, personal finance, computer languages, telecommunications, games, graphic arts, and business uses. Music applications will occupy a special demonstration area of their own. A hardware and software swap meet will also be in operation.

Seminar speakers on Saturday and Sunday will present timely information on the latest products, trends, and problems.

A special feature for 1989 will be "The Best of Atari Desktop Publishing," a contest for anyone who feels that itch to be creative.

Everyone gets a chance to unwind and mingle with our out-of-town guests Saturday night at a chinese banquet at the Hunan Lion restaurant in Fairfax. WAACE is recruiting an outstanding speaker and there will be special awards, including the prizes in the DTP contest.

Users Helping Users

WAACE is a confederation of user groups, people who are dedicated to the proposition that someone who has been there is in the best position to help someone else. The groups get front page billing at AtariFest with their disk libraries and membership campaigns.

Public domain software for Atari computers is a vital part of the mix and there are plenty of experts on hand to help you find your way.

Uninitiated members of the public who have never been in a

user group are in abundance at the Fest and the groups can recruit very effectively.

Anything that can inspire this much loyalty has to be worthwhile.

It's Your Fest

While the Fest doesn't cost the public anything, it does cost the sponsors a lot of sweat and tears. It takes about 150 people to set up the space and tear it down again, to staff the demonstration rooms, to assist the vendors, to print the program, to register the visitors, to plan the banquet, to sell advertising, to generate publicity, the list goes on and on.

For the 1989 event the organizers will be canvassing over 300 vendors from all over the world. Additional vendor space has been arranged for, and a dressier look will pervade the whole Fest. Additional print advertising is being laid on to encourage attendance at the Fest.

A bigger and better AtariFest means a bigger bill for labor. Something like 20 percent of WAACE's total membership will have to help (contact your club leadership to volunteer!). People from other clubs and other areas are welcome wherever they can help. There are lots of opportunities in the seminars, the demonstration rooms, advertising sales, graphic arts production, you name it.

The only profit the organizers and their workers take home is a feeling of satisfaction in sharing the joys of Atari computing with the rest of the world.



The Best of Atari Desktop Publishing

WAACE – Current Notes DTP Contest

All Atari computer users are hereby invited to submit entries to a Desktop Publishing contest sponsored by

Washington Area Atari Computer Enthusiasts and Current Notes Magazine.

Entries must be submitted before the 8th of September 1989. Judging and awarding of prizes will take place at the WAACE AtariFest on 7–8 October. The contest is intended to showcase the kinds of business and personal communications that are possible with 8 and 16 bit Atari computers. Personal and Commercial categories in both 8 and 16 bit divisions give everyone a chance to win.

The prizes will consist of valuable gift certificates for software and hardware as donated by AtariFest

supporters. Only one prize will be awarded in each of the four categories.

Copies of the contest rules are available from Current Notes Magazine at 122 N. Johnson Rd, Sterling, VA, 22170, from your local Current Notes retail sales agent, or by downloading the file DTPCONTS.ARC from the ST Roundtable on GENie.

CONTEST RULES

The contest rules listed below provide the restrictions and other guidelines governing the WAACE - Current Notes DTP contest:

- **1 Eligibility** developers of DTP products or their employees are not eligible.
- 2 Categories Submitted works will be judged in one of the following four categories: 1) 8-bit Personal, 2) 8-bit Commercial, 3) 16-bit Personal, and 4) 16-bit Commercial. Entries in the personal category will have been prepared for the use of the submitter and his/her family. Works will be deemed commercial if they are intended for wider audiences including, but not limited to, educational and social organizations, business clients, or the general public. <rule2>The judges may elect not to award prizes in categories for which there are fewer than 4 entries.
- **3 Originality** All work must be the original work of the submitter. Submitter must certify that none of the subject matter or graphic images are substantially derived from copyrighted works.
- 4 Rights of Use The submitter grants the full rights-of-use and publication to WAACE and Current Notes.. Material rejected as being unsuitable will be returned if the submitter provides return envelopes and postage.
- 5 Limitation as to number No more

than two entries will be accepted from any one household in any one division.

6 Use of Atari Hardware and Software

- All work must use Atari computers.
 Hardware from other manufacturers may be used as peripherals. Hardware or software that has not been available at retail to the public prior to 1 July 1989 may not be used.
- 7 Submissions All entries must be submitted as hardcopy accompanied by a floppy disk containing all components needed to produce the document. Floppy disks must be readable by standard Atari disk drives. Each submission must not exceed the capacity of one DS disk. Hardcopy output may not amount to more than the equivalent of five 8 1/2 by 11 pages. The submission disk must also contain a text file providing complete instructions for generating the final output. Products (hardware and software) used to create all graphics and text components of the work must be specified.

Submissions must be accomanied by a letter giving the submitter's name, address, and home telephone number and the title of the submission. Submission of an entry

constitutes affirmation that the submitter has read and agrees to comply with the contest rules. The organizers are not obliged to provide the opportunity for submitters to remedy defects in their submissions.

All submissions are at the submitter's own risk. The organizers will not assume any responsibility for wear and tear that submitted material is subjected to. Submissions shall be sent to William Price, 126 Casmar St. SE, Vienna, VA 22180.

- **8 Deadline** all entries must be in the hands of the organizers by September 8, 1989
- **9 Taste** The judges reserve the right to reject work that is offensive or otherwise unsuitable for public display at a family event.
- 10 Award Criteria The awards will be made on the basis of the effectiveness of submissions in conveying information. Visual impact and related factors such as style, arrangement, typography, and text content will be considered. The judges may elect not to award prizes if none of the entries in a category is deemed to be prize-worthy.

ENTRY	BLANK: 1989 WAA	ACE – Current	Notes DTP	Contest
	Complete a separate blank	for each submission	(PLEASE PRINT)	

Address: Apt	Street	:	
City		State	ZIP
Home Phone Number:	_	=	
Title of Submission:			
] 8 Bit [] 16 bit	[] Personal	[] Commercial	
certify that this submissio	n is my own origii	nal work and that non	ne of the material is derived from an

WAACE CLUB CORNER

This space is made available to WAACE member clubs for publicizing activities. Material for this column must be in the hands of the Clubs Editor by the 3rd of each month. Send copy to Ed Seward, PO Box 2699, Merrifield, VA 22116. Material can also be uploaded to the ARMUDIC BBS.

NOVATARI: Northern Virginia Atari Users' Group

President	Bonnie Little	703-444-2419	
ST VP	Ed Seward	703-573-3044	
8bit VP	Nina Kraucunas	703-250-3572	
Secretary	Edmund Bedsworth	703-536-5958	
Treasurer	Gary Purinton	703-264-8826	
ST Librarian	Frank Chan	703-960-0474	
9 hit I ibrarian	Roy Brooks	703-750-0146	
8-bit mail			
ARMUDIC Sysop	Scott Ogden		

New Members: Dues are \$24/year/family which includes a subscription to CURRENT NOTES and access to more activities. Join at the main meeting or at a chapter meeting or by sending \$24, payable to NOVATARI, to NOVATARI, PO Box 4076, Merrifield, VA 22116.

Novatari Main meeting: second Sunday of the month at the Washington Gas Light Building, 6801 Industrial Rd, Springfield, VA. Take 495 to east on Braddock Rd.(620) to south on Backlick Rd (617). Left on Industrial Rd. Washington Gas Light is the second building on the right. 5:30 Programmers SIG; 6:15 announcements, open forum, door prizes; 6:45 VAST and 8BIT SIG meetings.

Chapter Meetings: Mt. Vernon/Hybla Valley, 1st Thursday, 7:30 Contact Ron Peters at 780-0963. Sterling, Sterling Library, 7:30-9:30, Wed after the Second Sunday Contact Richard Gunter at 471-7765. Vienna, 4th Sunday, Contact Ed Seward 573-3044 for time and place.

A.U.R.A.: Atari Users Regional Association

President	Niel Johnson	301-540-1794
8-bit VP	Steve Preston	301-972-9632
16-bit VP	Ira Horowitz	301-421-9507
Treasurer	Bob Brock	301-268-2554
Membership	Bill Brown	301-279-7537
8bit Librarian	Wayne Heiden	301-330-0130
16bit Librarian	Joe Russek	301-946-7593
Facilities		301-588-4802

MEETINGS: Third Thursday of each month in the Multipurpose Room at GRACE EPISCOPAL SCHOOL. The school is on the east side of Conecticut Avenue, 1/4 mi.north of the Connecticut Avenue (North) Exit from 1495. Library and swap table sales begin at 7:15, the meeting begins at 7:30. We have separate XL and ST demonstrations. There will be 8-bit and 16-bit door prizes.

Correspondence. All correspondence, including membership renewals, changes of address, etc. should be sent to: AURA, P. O. Box 7761, Silver Spring, MD 20910. AURA cannot guarantee CURRENT NOTES subscriptions unless the member provides written confirmation of address changes, renewals, etc. to the address given above.

New Members. Dues are \$25/year and include subscription to CUR-RENT NOTES. Send name, address, phone number, and check to above address.

F.A.C.E.: Frederick Atari Computer Enthusiasts

President	Chris Rietman	301-791-9170
Vice President	Mike Kerwin	301-845-4477
Treasurer	Buddy Smallwood	717-485-4714

MEETINGS: 4th Tuesday, 7 – 9:30 pm, Walkersville HS, MD Route 194, 1 mile north of MD Route 26 (Liberty Road). July and August meetings will be held at St Paul's Lutheran Church, 14 W. Pennsylvania Ave, Walkersville, MD.

NEW MEMBERS: Dues are \$25/year/family and include a subscription to CURRENT NOTES. Join at meeting or send check, payable to FACE, to Buddy Smallwood, PO Box 2026, Frederick, MD 21701.

G.R.A.S.P.: Greater Richmond Atari Support Program

TEST TOWNS OF THE PARTY OF THE			_
President	Mickey Angell	804-744-3	307
Vice President	Terry Barker	804-379-8	175
Secretary	Tom Marvin	804-233-6	155
000,010,1			

MEETINGS: 2nd and 4th Thursday, at La Prade Library, 2730 Hicks Rd. Dues: \$20 per year (no CURRENT NOTES).

WACUG: Woodbridge Atari Computer Users' Group

President	Lou Praino	703-221-8193
VP	Ron Dunn	703-494-4260
8Bit VP	Darrell Stiles	703-494-9819
	Bill Parker	
	David Waalkes	
Secretary	. Jim Sawici	703-670-3527
	. Frank Bassett	

MEETINGS: 7-9PM, Community Room, Potomac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. Entering Woodbridge from either North or South on Route 1, proceed to theintersection of Route 1 and Opitz Blvd. (opposite Woodbridge Lincoln-Mercury). Turn West on Opitz and take first left turninto the library's parking lot. The Community Room is located toyour left immediately upon entering the main building. Meeting Dates: May 16, June 20.

NEW MEMBERS: Initial membership fee is \$10 plus \$1 monthly dues. Renewals are \$20 per year, payable as of 1 January.

Membership includes a subscription to CURRENT NOTES. Join at meeting or send check, payable to WACUG, to David Waalkes, 1302 Oregon Ave, Woodbridge, VA 22191.

M.A.C.C.: Maryland Atari Computer Club

President	Jim Hill	301-461-7556
Vice President	Dan Honick	301-356-6453
Treasurer	John Cromwell	301-356-6453
Secretary	Bob Brent	301-254-3896
8bit Librarian		
ST Librarian	Tim Caldwell	301-687-1413
Newsletter Ed	Charles Smeton	301-465-8628
Correspond. Secy	Cam Whetstone.	301-486-2609

MEETINGS: last Tuesday, 6:30 pm, Pikesville Library, 1 mi. east on Reisterstown Rd from Exit 20 off the Baltimore Beltway.

NEW MEMBERS: Club Dues are \$22/year and include a subscription to CURRENT NOTES. Join at meeting or send check, payable to MACC, to James Hill, 8591 Wheatfield Way, Ellicott City, MD, 21043.

S.M.A.U.G.: Southern Maryland Atari Users' Group

Pre	sident	. Herb Scott	
Sec	cretary	Fred Brown	301-645-4009
Tre	asurer	Samuel Schrinar	301-843-7916
		Leroy Olson	
		Sherwood Conner	

MEETINGS: 2nd Thursday, 7:30 pm, John Hanson Middle School in Waldorf, MD. Traveling thru Waldorf either east or west on Rt 5, exit on Vivian Adams located 200 ft west of Waldorf Carpets & Draperies and directly across from the Village Square sign.

NEW MEMBERS: Membership dues are \$20 and include a subscription to CURRENT NOTES. Join at the meeting or send check, payable to SMAUG, to Sam Schrinar, 2032 Alehouse Court, Waldorf, MD 20601.

M.A.S.T.: Meade Atari ST Users Group

President	Bob Johnson	301–674–8762
	Keith Drewke	
Secretary	John Corkran	301-255-1674
	Harold Beck III	
	Thomas Hutchinson	

Meetings - Third Wednesday of each month in the SeaLandAir rec center on Fort Meade from 1830 to 2100 hours. Call Bob Johnson any evening for further information.

Mailing Address: All correspondence, including membership renewals, changes ofaddress, etc. should be sent to: MAST, c/o Bob Johnson, 1616B Forrest Ave, FtMeade, MD 20755.

New Members. Dues are \$27/year and include subscription to CUR-RENT NOTES and unlimited DL and message activity on the Tangent Line BBS. Send name, address, phone number, and check to above address or join at any meeting.

WAACE GOINGS ON

Waace AtariFest 89 John Barnes, WAACE Chairman

AtariFest '89 preparations are gaining a little momentum. To keep up to date, check in on the nice special message area on ARMUDIC. Scott Ogden has done a fine job of setting this up. Not too many people have modems, so I would appreciate it if those of you who have them would download everything you can and spread it around.

By the time you read this, Johnna Ogden should have sent out letters to over 300 potential vendors. Gary Purinton and Bob Johnson should be sending in ads to

the Atari press.

A special desktop publishing contest has been set up, with Bill Price as chairman. An art contest is kicking around. Keep your eyes open for rules and entry forms.

The demonstration rooms and seminar series should be taking shape under the hand of Charles Smeton.

Russ Brown has set up a nice chinese banquet on the social side of the Fest and arrangements for rooms have been made with the Fairfax Quality Inn.

Atari Corporation is still playing its cards close to its vest, but the AtariFest (the people's Fest) is definitely a

go as far as WAACE is concerned.

The June meeting of the WAACE Board will be at the Bethesda Library on Arlington Rd. We are looking for a Springfield or Franconia location for the July meeting.

NOVATARI Ed Seward, ST Vice-President

Our apologies to everyone for the lack of a meeting place for the April meeting—Washington Gas & Light shuffled some people around and we fell through the cracks.

Scott Ogden was able to nail down the cause of the increased line-noise and BBS lockups. The Nite Lite interface was going bad and went comatose. Repairs are underway and ARMUDIC should be restored from three lines back to seven lines by the time you read this. You will find that with the hardware problem resolved now, ARMUDIC is once again running consistently and

smoothly.

We are currently working with Michtron and Double–Click to switch the software and hardware that ARMUDIC runs on. The holdup is Double–Click's asking price for a five port version of their cartridge—\$500 versus the \$229.95 price of the three port cartridge. The Michtron software offers many improvements in the file and message areas over the Nite Lite software. Also, I have found the DC Port has fewer problems with line noise. Scott and I are working on the menus now in the hopes that Double—Click will come down on their asking price. Assuming the switch will be made, the bulk of the menu system will remain the same as it is now. While the file areas will be rearranged, we will keep ALL of the

downloads currently on the BBS. I'll also reenter the passwords myself so that it will not be necessary to reapply for access. While we are waiting for this to take place, we will be putting up a couple of surveys regarding the way users would like the BBS to function.

Among the demonstrations Novatari has planned for the near future are: a demo on how to use the various features of ARMUDIC; *Cyber Paint*, and *STOS* the game

design package marketed by Antic.

As in years past, NOVATARI is looking for volunteers to assist with ATARIFEST (both to help in the rooms NOVATARI is sponsoring as well as some of the general things like setup, cleanup, etc.). If you are interested, please call one of the NOVATARI officers so that your name and phone number can be passed on to the person responsible for that area.

A.U.R.A. Niel A. Johnson, President

Greetings from AURA! We're looking forward to our May 18th meeting in which games will be featured. All members are encouraged to bring in their favorites to show off to the rest of the club. We will also feature a video which recently aired on local television.

Our last meeting featured telecommunications. Special thanks go out to Ed Seward and Scott Ogden from NOVATARI for putting on a fantastic demonstration of their ARMUDIC BBS. (I never saw a MEGA-4 before ...)

Our Flea Market is still a popular attraction at the meetings. Don't hesitate to bring in your dusty software and computer paraphenalia—they could mean a bargain for someone else! Who knows? Maybe you'll find something interesting. It all starts around 7:00 PM.

Upcoming events: Digitized Atari, Music, and More

Games. Did I hear someone say "PICNIC"?

Don't Forget to **RENEW** Your Club Membership!!! If your mailing label has **8906** on the first line, your club membership ends in **June**--this month! RENEW with your club membership chairman ASAP!!!

NEW NUMBER ARMUDIC BBS 703-450-3910

300/1200/2400 Baud, 8 and 16 bit

Access to the BBS requires a fee in addition to the dues. This fee is \$5/year for NOVATARI members and \$7.50 for members of other user groups. BBS access fees are to be made payable to "NOVATARI" and sent to: Ed Seward, PO Box. 2699, Merrifield, VA 22116.

CURRENT NOTES MAGIC/SPECTRE LIBRARY

These disks contain Mac programs for use with the **SPECTRE/MAGIC SAC** Macintosh emulators. Disks are \$4.00 each. Order from CN Library, 122 N. Johnson Rd, Sterling, VA 22170. Add \$1 for every 6 disks for S&H.

Note: many of the Magic disk programs also work with the Spectre 128, but not all. Adventure-type games now DO WORK with version 1.9 of Spectre with the SOUND turned on. Pinball Construction Set disks are a real blast with SOUND turned on.

DESK ACCESSORIES

M8: DAS NO. 1.3DTTT Game, Art Thief, Ascii, Bagels Game, Big Ben, Calculator, CopyFile, DA Tester 1.5, Delete File, Desk Acc. Tester, DeskZap 1.2, Eject&Reset, Extras, File Hacker DA, File Tools, Font Grapper+, Font Grapper3, Hex Calculator, HP 12c, MemScan, MemWindow, MerriMac BlackJack, miniWriter, MockTerminal, MockWrite, Moire, MW Count, Other 3.0, Puzzle, Reader, Rubik's Cube, Sampler, Scrapbook, Scientific Calculator, SetFile 3.3, SkipFinder, TheBox, Tiler 1.5, Trails, Transfer, TrapList, Utils, Word Count, Zoom Idle.

M18: DAS NO. 2. About Popup.txt, Alarm clock, Art Grapper+, Calculator+, Choose Scrapbook+, DA File, DA Tester 1.5, Disk Labeler, DiskInfo 1.45 + SICNs, Explorer, Gone Fishin', Hex Calc, Label Maker, MemWindow, MiniWRITER 1.34, Multi-Scrapbook, MW 4.5 Counter.DA, Popup 1.0, ProCount, ReadiPrinter, Ruler, SFstartup 1.0, Skipfinder 6.1, Sleep, Stars 1.6, Stars II, Sysfonts, TeaTime, Timer.

M46: DAS NO. 3: 35 DAS: 3D Tic-Tac-Toe, A-Bus ID Poker, Abacus, Calendar, Cheap-Paint, Collapse, ConCode, Crabs2, DAFile, DAFont, Disp.Msg, Double Apple, Executive Decision, FatMouse, FixPic2.0, Flow, Fun House, Func Keys, Font, Idle, KeyMouse, KnockOut, Multi-Scrap, MW to Text, New Mini-Dos, Orig Clock, PaintDA, Poker, ProCount, Ruler, Tiler1.5, Timelogger2.11, Utilities, Wrap, WXModem, Sample It.

UTILITY DISKS

M2: TELECOM DISK NO. 1. BinHex 5.0, Free Term 1.8, FreeTerm.Doc, Kermit, PackIt III (V1.3), Stufflt 1.0, TermWorks 1.3.

M3: UTILITIES NO. 1. DES, Font Doubler, MacDump, Mini Finder, Packlt III (V1.3), Reverse Screen 1.0b1, RMover, Scan, Set File. SLICER. Version Reader 1.1, Write Stream.

M5: DISK LIBRARIAN. Disk Librarian V1.82A. Disk Librarian Doc, Short Doc. Contains listing of CN MAGIC LIBRARY. (Spectre Compatible)

M9: UTILITIES NO. 2. Bind Icons, Change Appl. Font, Convert Desk Acc., Desk Accessory Mover, File Hacker, FontDoubler, Index,Make-Screen, MicroFinder, Purgelcons, RamAStart 1.3, REdit, ResEd, SelectPaint, Show Version, User Interface Demo.

M11: PRINT UTILITIES. Coventry-12, Disk Labeler, Fast Eddie, Font Mover, Ink, MacWrite 4.5 to Text, miniWriter, MockWrite, Pica-10, ReadMacWrite, Walla Walla-9.

M27: UTILITIES NO. 3. Browse/Shazam!, Clocks: analog & digital, Edit, FEdit 3.0, launch,

lazymenu, Magic Beep 1.0, Menu Editor, microFinder, Quick Dir, Quick Print, Ram-Start2.0+, Road Atlas, ShrinkToFit, SicnEdit, SortMenu, SortMenu Code, SuperFinder4.0, TabsOut, Unpit, WayStation.

M28: RED RYDER 7.0. Red Ryder 7.0, Red's 7.0 Stuff, RR7.0 Macros, RR Docs.

M43: UTILITIES NO. 4. DiskDup+, MacS-noop 1.03, RamDisk+ 1.4, ResTools 2.01, Oasis 2.01 (HFS), Font Librarian (HFS), Switch.

GAMES

M4: GAMES NO. 1. Backgammon, Bash Big Blue, Curves, MacLuff, MacYahtezee, Maze 3D, Meltdown, Missile Command, Munch, Pepsi-Cas, Smile, Snow, Solitaire, Space Bubbles, Vax Runner II.

M6: GAMES NO. 2. Ashes, Black Box, Destroyer, HexPuzzle, Killer Kalah, MacPoly Demo, Office Attack, Point Symmetry Demo, Snake, Solitaire, Trophy List, Wall Game, Wheel.

M7: GAMES NO. 3. Ashes, Break the Bricks, Deep Ennui, Go, Mac Gunner, MacBugs, MacCommand, MacYahtzee, Wiz Fire 1.1

M15: GAMES NO. 4. Alice, Amps 3.0(B2), Bricks, Canfield 2.0,lago, Lets Get Tanked!, MacHeads, Nim, Space Attack, Third Dimension

M20: GAMES NO. 5. Chase'Em, Crystal Raider, Daleks, Golf MacWay, Kill File, Kill, King, King.MacWrite, On-The-Contrary, StuntCopter1.2.

M21: GAMES NO. 6. Guess, Hacker's Contest, Hot Air Balloon, Match, Ramm1.0, Third Dimension, Trick-Track, Utaan Attack, Zero Gravity.

M25: GAMES NO. 7. Billiards, Cross Master Demo, Flash Cards, Hangman-9.0, MacLuff, Master Guess, Safari 1.0, Venn.

M30: GAMES NO. 8. Bowl-A-Rama, Mac-Trek 1.1, Mystery Box 1.0, Shots, Star Trek Trivia Quiz, Window Blaster 1.0.

M34: GAMES NO. 9. 1000 Miles, Asteroids, Cairo ShootOutl, Donkey Doo, Duck Hunt, Pente 1.0.

M45: GAMES NO. 10. Blackjack 4.0, Gunshy 1.0, Humpback, New Social Climber, Panic, Puzzle 1.0, Star Trek Trivia Quiz, VideoPoker.

M51: GAMES NO. 11. Bouncing Balls, Fire Zone, Mac Word Hunt 2.0, Out Flank, Risk and Word Search.

M53: GAMES NO. 12. 3D Checkers 2.0, Bills Casino, BMX-The Racing Game, HeloMath, Mouse Craps.

M58: GAMES NO. 13. Klondike 3.6, Space Station Pheta, Mac Concentration, Sitting Duck, Hot Air Balloon 2.1, Think Ahead+2.0.

M60: GAMES NO. 14. Golf Solitaire, Mac Football, Euchre 2.2, Gomoku, Pyramid, Checkers, Runaround and Macpuzzle 1.0.

M19: PINBALL CONSTRUCTION SET GAMES. Pinball Construction Set Player plus 12 Games: Apple, Black Hole, Face, KalinBall, Madonna, Minute-Mag, Patchwork Mess, Phantom, Pure-Gemme, Samurai, The Royal Pain, Wizards Lair. (Spectre Compatible)

M29: PCS GAMES NO. 2. Pinball Construction Set Player plus Games: Circus Circus, D &D , Diadora, Max, Merlin, Modern Mistress, Queston, The Royal Pain, Twilight Zone, Whazit. (SPECTRE COMPATIBLE)

ADVENTURE GAMES

M17: DUNGEONS OF DOOM 4.0. Graphic adventure game.

M23: VAMPIRE CASTLE. Graphic adventure game.

M24: DEEP ANGST. Graphic adventure game. 1 Mb ST only.

M31: BLACK WIZARD. Graphic adventure game by Richard Loggins.

M36: CASTLE OF ERT. Shareware graphic adventure game.

M40: HACK, Version 1.03. Game is similar to Rogue, includes manual with full docs.

M41: RADICAL CASTLE. Graphic/text adventure game.

M63D: MOUNTAIN OF MAYHEM.

M65D: DEEP ANGST II

M66: INTRUDER

GRAPHICS

M10: GRAPHICS NO. 1. Amy, Artisto, ball demo, Big Ben, Brooke, Bugs, Curves, Display Message, Dragon, Fighting 51, Fourth Dimension, GARF, HotSexl, Liar's Club, Living Art, Max Headroom, Moire 3.0, Nightmare, Optical Illusion, Paint Grabber, Painter's Helper #1, Pattern*, Pisces, Rotations, Saddle, The Fourth Docs, ViewPaint 1.5.

M12: MACBILLBOARD. Chipmunks, Donald & daisy, Goofy At Bat, Announcement, Babe Ruth, Carrotprint, Classic illusions, Escher, Escher Hands, MacBILLBOARD (MacPaint clone), Max, Mickey and Minney, mm, Quick Tour, T-Shirt. (Spectre Compatible)

M22: GRAPHICS NO. 2. BlowUp 3.0, BlowUp Notes, CalendarMaker 2.2.1, Dynamo, Graphic, MadMenus, Math21, Rays, Simutree, Spiro, Tree, Vanlandingham.

M26: GRAPHICS NO. 3. 3D Sketch, AniRama, Bin/Graphics, Brownian Motion, Control, Fractal Contours, Fractals, Icon Collector, Julia, MakePaint, Melting Clock, Small View, ShapeArt, StarFlight, Window Demo.

M47: GRAPHICS NO. 4. Cursor Designer, Earthplot3.0, Graphics2.0, Mondrian1.0, MotionMaker2.0, Moving Finger, Wallpaper, Zoomation.

M57: GRAPHICS NO. 5. Contains 6 graphics-oriented applications or DAs: Micro Film Reader 1.4, Bomber, Iliana II, Preview, Super Ruler 1.1, and XVT-Draw.

FONT DISKS **

M13: FONT DISK NO. 1. Akashi, AlgBlurb, Algebra, Athens, Boxie, Dover, Geneva, Hood River, ImageWriter, LED, London, Los Angeles, Luxor, Mars, Monaco, Park Ave, Pica, Ravenna, Rome, Runes, San Francisco, Seattle, Steel Brush, Ultra Bodoni.

M14: FONT DISK NO. 2. Bookman, Courier, Coventry, Dali, Genevaa, Hebrew, Manteco, Shadow Box, Sri Lanka, Times, Walla Walla, and font display 4.6 w/docs.

M16: FONT DISK NO. 3. About Lachine, Alice, Avante Garde, Berkeley, Broadway, Camelot, Cartoon, Centura, Chancery, Eon, Exeter, Fallingwater, Fantaste Key, Fantaste!, Future, Ham, Helvitica, Hollywood, Lachine, Lineal, Madrid, Pittsubrg, San Quentin, Silicon Valley, Stencil, Unicol plus DAFont2.da and SvsFonts.da.

M32: FONT DISK NO. 4. Canberra, Chicago,

CURRENT NOTES MAGIC/SPECTRE LIBRARY

Humanistic, Music, New Dali, Palencia Application, Palo Alto, Pioneer Shadow plus F/DA sorter and Font Tester.

M35: FONT DISK NO. 5. Beehive, Beverly Hills, Boise, Chicago, Courier, DeStijl, Ham, Happy Canyon, Helvitica, Mod. Chicago, Old English, Square Serrif, Sri Lanka, Worksheet.

M42: FONT DISK NO. 6. 15 new fonts: Berlin, Boston II, Courier, Dorza, Highwood, Micro-Boston, MiniBoston, New York, Palo Alto, Sparta, Stiletto, Symbol, Tatooine, Venice, Wartburg.

M44: FONT DISK NO. 7. 18 new fonts: 42nd Street, Aldous, Art Deco, Ascii, Blockbuster, Border, Clairvaux with docs, Coptic, Deep Box, Ivy League, Klingon, Las Vagas, Little Box, Madrid, Memphis, Minneapolis, Rivendell, Spokane.

M50: FONT DISK NO. 8. Alderney 9-48; Cairo 18; Cyrillic 12; Greek 10,20; Paint 18; Playbill 12,18,24; Rehovot 10,12,20,24;Runes 12,24; Washington 12; Zodiac 18.

M61: FONT DISK NO. 9. New Century 10–24, Helvetica 10–24, Columbia 9–24, Minneapolis 36, Creamy 10–24, Palatino 10–24, Detroit 24, and Zap Chancery 10–24.

M64: FONT DISK NO. 10. York, Paint, Miscpix, Icon, Cupertino, Arabic, Fallingwater, Schematic, Moscow, and Isengard.

M67: FONT DISK NO. 11. Cavanough, Icon2, Fletcher, Math-Greek, Toyland, Troyes, Memphis, Provo, Scan, Tombstone, Southbend, Klingon, Wall Street.

CLIP ART **

M33: CLIP ART NO. 1. AirCraft, Business, Car Logos, Cars & Trucks, Clip Art Demo, Disney, Eyeballs, Flowers, Misc, Seasons, Trees1, Trees2, ViewPaint 1.5.

M52: CLIP ART NO. 2. 27 files: Al&Jimmy, Americana, Arrows, Bigger Guys, Billboards, Borders, Cars, Cartoons, Cats, Celebrities, Egret, Famous People, Farm Animals, Good Guys, Gorilla, Hopefuls, Little Guys, MacLectic Clip Art, More Little Guys, Presidents, Rain/Chef, Skier/Football, Skylines, Space/Race, Statues, Tennis/Running, Wine & Beer.

M55: CLIP ART NO. 3. 26 clip art docs in MacPaint format: Animals, arrows, books, business, calendar, computer, disk, files, geography, holiday, houses, icons1–6, mail, memo, misc1, misc2, money, music, office, people and symbols.

COMMERCIAL DEMOS **

M37: MAC-A-MUG PRO DEMO. Version 1.0, Create your own mug shots by combining a variety of different facial features.

M38: VIDEO WORKS PLAYER NO. 1. PD player for Video works animated screens. Includes 11 movies.

M39: DEMO DISK NO. 2. Anatomiser (learn human anatomy), DeskPaint (desk acc Mac-Paint clone), and SuperPaint (graphic program with both MacPaint and MacDraw features).

M54: DESIGN. Full working version of the program Design (no save feature). Includes 5 samples and full documentation.

M59D: DEMO DISK NO. 3. Demo version of Kaleidagraph and Geographics II. Double-sided disk.

M62: DEMO DISK NO. 4. Math Blaster and

Blob Manager Demo.

HYPERCARD DISKS **

M48D: HYPERSTACKS NO. 1. Address, Databook, Fractal, Funy Day, Home Desk, HyperNews 1.2, HyperZoetropes, MacGallery, MacVermont #2, Notebook, Periodic Table, and ResEdit IPS. (Double-Sided)

M49D: HYPERSTAKCS NO. 2. Ear, Illusions, Passing Notes, Shipstack, Silly, and US States V2. (Double–Sided) NOTE M48 and M49 require HyperDA using 64K ROM Spectre or Magic Sac.

M56D: HYPERSTACKS NO. 3. Contains only 1 hyperstack, Atkinson's 786K Clip Art Stack, with 500 pieces of clip art. Disk is Double-sided and requires HyperDA when using 64K ROM Spectre or Magic Sac.

** Spectre 128 compatible.

SPECTRE 128 PD Library

Note: These disks require Spectre 128 (128K ROMs) and DO NOT work with 64K ROMs unless otherwise noted.

S1: MACWRITE 5.0 DEMO (Cannot print/save but can load and read doc files.)

S2: MACPAINT 2.0 DEMO (Cannot print/save files but can load and view and create them.)

S3D: RED RYDER 9.4 (DS disk) This is the last shareware version to be released before it became a commercial product. One of the most powerful telecommunications programs available for the Mac. Full docs and utilities for batch downloading included.

S4D: ALDUS FREEHAND DEMO. (DS disk) A Videoworks II interactive demonstration of Freehand drawing program.

S5: GAMES #1: Banzai, Monopoly 4.0, ATC 4.0, Mines, New Daleks, Brickles 4.0

S6D: POWERPOINT DEMO (64K ROMS COMPATIBLE)(DS disk) Fully working demo version of this popular Mac program for planning, composing, and creating complete presentations. (Also works with Magic Sac).

S7: GAMES #2: Space Bubbles, Stratego, Investigator #1, Towers of Hanoi, Marienbad

S8: IMAGE STUDIO DEMO (Does not save). A photo retouching lab on the desktop, modify digitized images in 65 grey scale levels.

S9: TELECOM #1: Stuffit 1.51, Stuffit Users Guide, Freeterm 2.0, Freeterm 2.0 Documentation, TermWorks 1.3, Packet III (version 1.3)

\$10D: STACKS #1: Concentration, Hyper,—Gunshy, Dinosaurs, AutoStack, Home 1.2 (DS Disk)

S11: UTILITIES #1: MacEnvy, Benchmark, DiskTimer II, Samplelt 1.21, Samplelt Docs, Apfont 3.2, HierDA, Fever, OnCue 1.3 DEmo, ScreenDump II, Findsweel 2.0 Demo

S12D: FULL IMPACT DEMO (DS Disk) An extremely powerful spreadsheet program with even more features then Excel. (No save feature.)

S13D: STACKS #2: VisualStack, Chem Flash Cards, DisplayPict 1.4, Indigo Gets Out, AutCat, Animal Stack, Comic, OnTheBeach, Name That Plane. (DS Disk)

\$14: UTILITIES #2: Big Das runner, Mac II Icons, DiskParam and Docs, Utilities 1.5.1 Guide, Unstuffit DA 1.5.1, Auto Unstuffit Installer 1.5, Repair 1.2, ICON Designer, Viewer 1.5.1,

SuperClock 3.1, SuperClock Doc ToMultiFinder, Interferon 3.1, Interferon Instructions

\$15: GAMES #3: Darts, MacCamelot, Brick-lesPlus, Gravitation 4.0, Swamplord

\$16: DAs #1: NekoDA, BezierDa and Docs, SnapShotDA 1.2, Adventure and Docs, Virus-Detective and Docs, BreakKey and Docs, SysErrTableDA, PinUp Clock DA, Freemem, New Scrapbook DA

* * * New in May * * *

\$17: SOUNDS #1: SoundMaster and 22 assorted sound files for use with V1.9 of Spectre.

S18: GRAPHICS #1: 15 assorted graphics files and docs (1Dmata, DAfx 1.32, 3dEDIT, Fly Saver, Kaleidoscope, Optical, Pattern Blocks, Rae, Turbo View 1.01, MacPaint Shortcuts, Desktop Shortcuts.)

\$19D: Hyper Utilities #1. 10 utility stacks for HyperCard (Deprotect Stack, XPICT, Moving Cursors Tutorial, Button Manager, Stack Compacter, Field Line Numberer, CardMover, Six Little Goodies, MH PowerScripts Sample, ShowDialog 1.5) DS disk.

S20D: MacDraw II Demo. VideoWorks format takes you through tour of latest features. DS disk

S21: Utilities #3. (File Scan, Jaws Icon, File Master Icon, File Monster Doc, SnapShot Installer, Black Hole 6.0.2, Looney Tunes Icons, Dog Trash Icon, Shredder Icno, UDS/M1.1, Virus RX 1.4a2, System Font. Note: Some of these icon files require ResEdit for installation.)

* * * NEW IN JUNE * * *

S22: Sword of Siegfried. Graphics/text adventure (requires ver 1.9 of Spectre w/sound turned on.

S23: Sounds #2. 17 sound resource files and a demo version of Mac CD 1.0. Sound files may also be used w/SoundMaster on #S17. (10000 Marbles, Any Sound 1, Any Sound 2, Bad Disk 1, BVad Disk 2, Beep, Beep Sound 1, Disk Sounds 1-4, Don't Worry Be Happy, Ka-Chung!, Rolling Your Own, Type Key 1, Type Return 1, Type Space 1.)

\$24: Games #4. Dragon 2, Zoony, MazerLazer, and demo version of ShufflePuck.

S25D: MacMoney Demo. Personal finance program, full-featured demo, prints but does not save. Double-sided disk.

S26: Fkeys #1. 23 fkeys and fkey related applications (Analog Clock, Clock, CopyDisk 3.0, Craps, F-KEY Installer, FadeKey, FileInfo, fkey, Fkey File Installer, Fkey-DA Sampler 2, FkeyView 2.5, FullMoon Calender, InfoKey, LaunchKey, MacAlmanac, Pipeline, ResC-Viewer 4.5, SafeLaunch 2.2, SpaceWarp, Strip-Tease, Unpack, Ver Reader 3.0 and Windows.

NOTE: CN disks cost \$4.00 each, but discount prices are available for quantity orders:

10+ disks (\$3.80 each) 20+ disks (\$3.60 each) 30+ disks (\$3.40 each) 40+ disks (\$3.20 each) 50+ disks (\$3.00 each)

Add \$1/6 disks for shipping and handling.

Order from CN Library, 122 N. Johnson Rd, Sterling, VA 22170.

CURRENT NOTES ST LIBRARY

OCTOBER 1988

#271: Lambert Pics No. 3. 12 Degas elite pics.

#272: ALF Pics. 11 digitized pics of Alf. #273: Games No. 15. Hacmanm, Jump-

man, Escape (C) #274: Games No. 16. Midway Battles,

Hero! V1.0, (C)

#275: Air Warrier, VO.8. Flight simulator program for private practice or multiplayer aerial combat on GEnie

#276: Disk Cataloger and Label Printer. Shareware by Saraware.

#277D: GNU C Compiler, by Free Software Foundation, (C) 1988.

ming (C). programs from book same name. #279: Atari SLM804 Laser Disk. Diabol Emulator 1.2, GDOS Boot 1.2, LCamelot

NOVEMBER 1988

#280: Lambert Pics No. 4. 18 Degas Elite pictures.

*#281: Manual Maker. V2.25 Use GDOS fonts to produce attractive manuals.

#282: Damonoid. (C) Arcade game. NO MEGA

#283: Adventure Games. System 5, Once A King, El Bozo's City Out of Bounds.

#284: Desk Acc No.3. Mouse doubler, mouse editor, address book, Double-click software's Clock, Formatter, Stuffer.

#285D: Star Trek (AVS).

#286D: California Raisins (AVS).

#287D: Miami Vice (AVS).

#288, #289, #290, #291: GNU C Source Code: Four disk set includes Make and Other Utilities, Assembler, Compiler, header files, DIFF source and a collection of documentation.

DECEMBER 1988

#292: Lambert Pics No. 5. Spectrum: 2kittens, blackbird, chipmunk, fox, owl; Degas Elite: drag108, dragcol, dragcovl, dra-

#293: Dungeon Master Maps.. Maps and a cut'n'paste spell chart to aid you in your quest in Dungeon Master.

#294: Kid Games No. 3 (C). Kid Publish and Kid Shapes.

#295 Sticker (M). German disk labeling program with graphic images.

#296: Stacatto. Musical quiz game. Just listen or try and guess the song names as quickly as possible.

#297: Amaze. Maze Construction Set. Draw an image boundary and then solve on screen or print out your maze.

#298: C-Source Disk No. 9. The source code to ST Xformer V1 and V2. (The Atari XE Basic emulator).

#299: Pascal Disk No. 5. Disk labeling program and referencing pixels on the screen.

JAN/FEB 1989

#300: Dual Term. Telecommunication program by Tony Belding. Text capture or upload, xmodem, automatic dialing AND display of both VT52 and ATASCII graphics. #301D: LDW Power Demo. Demo of LDW spreadsheet includes folder of VIP/ LOTUS/LDW templates. DS disk.

#302: Lambert Pics No.6. (C) 17 Degas Elite pics (3Dship Bogart, F15 F18_3 Frtank Gablec2 Goali Hansolo, House Kingkool Kitty Klingnon Monument Porsche Spidey2 Strohs Sun.

#303: Uniterm, Ver 2.0E. Terminal emulator for the VT102/220 and Tektronix's 4014 terminals. Includes Xmodem and KERMIT protocols. Files ARC'd. [Replaces CN #88]

#304: Electronic Jigsaw Puzzle V1.2. (C) puzzle program for Neo, Degas, and Tiny pictures (color only). Includes 14 pictures that can be divided into 25, 64, or 100 pieces.

#278: Atari ST Applications Program - * #305 & 306: Modula2 Language. 2-disk set contains full working implementation of Modula2 language (note: Manual not included but can be obtained from author.)

> #307D: Calamus Demo. (M) Demo version of newest DTP program from Europe. Includes sample documents (some ARC'd). 1Mb, DS disk.

> #308D: Runaway Cat. (C) AVS disk with a PD player so you can see animation and hear music at the same time. (Note: player also works with: CN #285, 286, 287.) 1Mb,

#309D, #310D, #311D: TEX: Text Document Processor. (M) 3-disk set contains TEX document processing language. Drivers provided for EPSON compatible 9-pin dot matrix printers only. Req monochrome, 1Mb, DS

MARCH 1989

#312: NEO/DEGAS CONTEST WIN-NERS. 21 award-winning pictures: tribar, dragon, midearty, city2042, cougar4, distill, dungeon1, egore2, fighter, forest, gilbert, house (shown below), millyw, nitemoon, panzer, plantfal, pyramid, sailing, shuttle, snowcat, wayne.

#313: ZOLTAR. (C) Arcade game similar to Galaxian but gives the user the opportunity of defining your own alien ships, their flight patterns and speed. Produced with STOS Basic.

#314: BULLET TRAIN. (C) Arcade game: pilot your train fast enough to avoid pursuing train while watching out for dead-end tracks and box cars blocking your way (that's what the "bullet" is for!). Produced with STOS Basic.

#315: ORBIT. (C) Arcade game similar to Breakout and Arkanoids. Includes wide variety of different "bricks" and screens. Define and save your own screens. Produced with STOS Basic

#316: CASINO-KENO. (C) Version 1.0 faithfully simulates keno games in Nevada allowing the player to mark on a keno card up to 15 numbers out of 80. Creates and saves personal account information to disk so play can continue later. By Glenn W. Ulrich.

#318: ASSISTANT CHEF. (C) Just the recipe program you've been looking for. Holds up to 300 recipes (42 included). Sort by recipe number, name, food group, food type, disk type, rating. Add to and edit recipes. View and/or print.

#319D: GENERATION GAP DEMO. (C or M) Demo version (10 record limit) of Generation Gap Genealogy program by Flying Pigs Software Double-sided disk..

#320: PRINT MASTER NO. 1. Includes Borders6, Borders7, Borders8, and Borders10 for PM and PM+ and a folder of PM_ART icons. Utilities allow conversion of PM to Degas and back as well as PM cataloguer program to view/print an alphabetized catalogue of any PM files.

APRIL 1989

#321: ST WRITER, VER 3.0. The llatest version of ST Writer, Includes, English, Spanish, and German versions and complete

#322: SUB CAL. Sub Cal is a calculator with some extras. It will compute arithmetic expressions, definite integrals, derivatives, or solve equations. It will also solve polynomial equations up to the third degree. A simple plotting feature is included as well.

MAY 1989

#323: DATA BASE UTILITY DISK. CD Base: Simple to use Compact Disk Database. Written using GFA Basic3. Program presents your CD collection in a graphic format allowing you to view, edit, search and print lists. Diskette Management Utility by Archie Software. Great for anyone with more than 30 disks, this utility catalogs disks into a user-definable library then assign them a disk number. Instead of looking through tons of labels for a program, just type the name into the program and retreive the diskette by number.

#324: ASSORTED UTILITIES DISK. Arcit Shell V1.04--ARCIT can automatically ARC a whole disk of files, including folder contents, or can unARC many ARC files each into their own folder. Uses any version of ARC or DCOPY to do the actual ARCing or unARCing. Full documentation included. A shareware program. What is V1.2--identifies ARC files, ST programs, Degas, GIF, and Spectrum pics, Cyber SEQ files, ST Writer files, many varieties of 8-bit files, and more; 27 different kinds in all! Mouse-driven, works in any res. Quick Inf--This GEM- based program lets you load and save DESKTOP.INF files, edit the window and icon information, and even change your desktop without rebooting the machine. Abzshell--A command shell written entirely in assembler. Loaded in memory, it uses just a bit more than 6K. 17 commands, including 2 conditional ones, 5 variables. Can execute batch file at startup. Source, documentation and program included.

#325. STARNET BBS V.1.24. This version of the StarNet BBS is not in the public domain and CN hopes you will support it's author Eric Drewry. The program is configured for a single sided disk but will also work well with a hard disk. Supports word wrap, and a "doors" system.

#326: GAME DISK No. 17. Battleship-A Gem-based GFA Basic battleship game. You play against the computer, but remember, it isn't as easy as it sounds! Clowns-A ST version of a popular 8-bit game. It can

CURRENT NOTES ST LIBRARY

become quite addicting. Fun Laws—Ever wonder where all those "Murphy" type laws came from? Now you can read all of them with their sources. Very funny reading. Invaders—Space Invaders for the ST! This is invaders the way it was ment to be played! World Map—This draws a detailed world map. Not very useful, but it is fun to watch.

JUNE 1989

* * * New This Month * * *

#327D: SONUS SUPERSCORE DEMO. Demo version of this MIDI sequencing and scoring software package. Requires 1Mb and Monochrome monitor.

#328D: GENIE ST Roundtable DB - by Library/Topic.

#329D: GENIE ST Roundtable DB - by File Number.

These disks contains a complete database of ST files available within the ST Round-table. #328 is arranged by library and topic while #329 is sorted by file number. The description for each file is the standard 30 character GENIE description but still very useful if you are looking for a particular file. These files can also be helpful in identifying some of those 'ARC' files in your collection. Program includes a variety of search options such as: file number; filename; uploader's name; date uploaded; file size; number of times downloaded; library and description.

#330D--#335D: Seeker Bible search program (a six-disk set). Seeker searches through the Bible (King James version) for ANY word or phrase you choose. You can toggle the case sensitivity on or off. Other options include searching only specific books within the Bible or the entire work. The program reads in one book at a time so that the search is performed in memory speeding up the search process. The total text on these six double-sided disks is 4,543,863 bytes and appears to be the complete Bible of 66 books.

#336: BSTAT Statistical Graphics Program. It is at present in a beta test state. It is quite complex and contains virtually any statistical function you might need including descriptive statistics, correlation, tests for normality, probability distributions (t-tests, multivariate analysis, ANOVA, variance tests), and a variety of regression and time series analysis tools. Program includes a data editor and full graphics capabilities (pie, bar, bubble, hi-lo, star, box whisker, and many other forms of graphics). Online help and full documentation and a tutorial included.

#337: GRAPHICS DEMOS. In this disk you will find an assortment of AVS demos as well as a Cyber animation demo, and the player programs for both of them. Both demos include instructions. The first AVS demo is of Buggs Bunny and the other shows a spaceship getting hit with lazer blasts. The Cyber animation is of a four cylinder Honda engine cutaway showing the four stages of combustion. Has variable speed capability.

#338: MICRO-EMACS VERSION 3.10.

Latest version of this popular text editing program now provides 'some' mouse support. The complete manual, help file and text files are also on this disk. NOTE: This replaces disk #192 (Ver 3.9).

#339: EXTENSOR. This is a game based on the 'LIGHT CYCLE' sequence in the movie TRON. It will play equally well on color or b/w monitors. It uses the joystick to control the light cycles on the screen. It has a multitude of programmable vairations to makethe game interesting. It can become addictive once the game-play becomes familar to the user.

#340: DISK LABEL PROGRAMS. Over a dozen different label maker programs. No matter what kind of label you are interested in, from standard mailing labels to labels for diskettes, file folders, casette tapes, or report covers, you should be able to find a program on this disk to help you. Some of the programs include database capabilities to help you build mail files while some produce labels for your disks by simply reading the disk directories. To fit as many programs on the disk as possible and still provide the information on a SS disk, we have ARC'd many of the programs. UnARC-ing software is included on the disk.

#341: PRINT MASTER UTILITIES. PM_2_DEG--shareware program which saves Print Master icons in DEGAS format. Will only save three icons per DEGAS page, registered shareware users will obtain a copy without the limitation. PS_2_PM--converts Print Shop icon data file to a Print Master icon library. Functional, but suffers from crashes. BORDERS6--A collection of borders for use with Print Master. More borders: REWVOL1, DINOREW, REWART1, CUSTOM, ICON1.

#342: DIGITIZED SOUND DEMO. For those of you who like to show off digitized sounds on your Atari, this disk gives you Richard Burton speaking (just over 20 secs) the prelude to the war of the the Worlds.

#343: UTILITIES NO. 29. DISSASSM—One of the few dissassembliers available at little cost to the ST community. Some minor problems. DCOPY312—COPY 3.12 plus a GEM shell for it. MYSTIC—accessory to do background formating of disks. Supports up to 10 tracks and 82 sectors. MACCEL—official mouse accelerator from Atari. RATEHD—Rate the speed of your hard disk. HEADST10—Another utility by C.F. Johnson. GIFNEO—Program to convert GIF files to NEOchrome. RAMBABY—Intersect Ramdisk & Print Spooler in one—works on MEGAS.

#344: UTILITIES NO. 30. ACC.PRG—a program that will let you load all of your accessories out of a folder called ACCS on the boot drive instead of loading them out of the root directory of the boot drive. This helps to keep your main directory less cluttered especially for hard drive owners.

DCFORACC—acc version of DC Formatter has all of the functions of the program version except the copy disk option.

DCFRM301—This version (v3.01) is a SHAREWARE product. It formats disks for

TOS. MS-DOS. and MAGIC SAC. QUICK-UTL--Reformat your disks with this and they will read faster!! You can reformat disks that already have data on them without losing it or having to copy to another disk. Trv it. you'll like it!!! QMENU2--Quick Menu 2.0a.A GEM based menu system for your floppy or hard drive based system. Many new options! QFIND -- Quick Find 1.0. Searches for files on floppies and hard disk partitions using a given file mask. Output can be redirected to a file or the printer. Works in color or mono, all versions of TOS. GEM based, with doc file. QUIKME: Quick Menu by Bill Boyd. A GEM menu program. Great for a hard drive! Use it to make your system a little more friendly! Developed on a monochrome monitor, but should work on a color system. QUICKS: QuickST 0.81--text output accelerator. Contains both an executable PRG and an accessory .ACC version. With docs. A poor man's blitter chip. QINDEX: This small utility allows you to benchmark your ST system in 5 categories: raw disk speed, GEMDOS efficiency, text printing, GEM, and the CPU. SCRNSAVE.PRG blanks out the monitor (either color or mono) after a specified period of no key activity so that an image won't "burn in" to the screen if it is left on without use. SUPRBT55-new version of Super Boot is now much more compatible with all hardware configurations, it has become "smarter", and several annoying bugs were corrected.

COMING NEXT MONTH IN CN A COMPLETE LISTING OF THE CN PD LIBRARY

Ordering Information

The programs on these disks are either public domain, or copyrighted but distributed freely to the public, or shareware products where the author would like an additional payment if you decide you like their products. Disk numbers with a 'D', e.g. 309D, indicate a double-sided disk. All disks are guaranteed. If you ever have a problem with a CN disk, just return it and we will gladly replace it.

Disks are \$4.00 each. Quantity discounts are available. If you order

10 or more, the price is \$3.80 each:

20 or more disk, \$3.60 each;

30 or more disks, \$3.40 each:

40 or more disks, \$3.20 each;

50 or more disks, \$3.00 each.

Add \$1 / every 6 disks or fraction thereof for S&H (max charge of S6). Order from:

CN LIBRARY 122 N. JOHNSON RD. STERLING, VA 22170 (703) 450-4761

Current Notes' Registered Atari Clubs

Members of registered clubs may subscribe to Current Notes at a discount rate (\$20/year or \$38/2 years). To add your club to the list, send an initial subscription list of 10% of the members or 6 members whichever is less, to CN Registered Clubs, 122 N. Johnson Rd., Sterling, VA 22170. For more information, call Joyce (703) 450–4761.

ALABAMA

Huntsville AUG, Levin Soule, 3911 W. Crestview, Huntsville 35816 (205) 534–1815.

ARIZONA

Tucson Atari Central, Sam Furrow, 2116 E. 1st St, Tucson, 85719 (603) 323–3410

ARKANSAS

Little Rock Atari Addicts, Keith Steensma, 28 John Hancock Cir, Jacksonville, 72076 (501) 985–2131.

CALIFORNIA

Atari Bay Area Computer Users Society, Bill Zinn, PO Box 22212, San Francisco 94122 (415) 753–8483.

San Diego ACE, Mark Lawless, PO Box 203076, San Diego 92120 (619) 581-2477.

Santa Maria/Lompac ACE, Mike Jacobson 608 N. Pierce, Santa Maria 93454 (805) 925-9390.

CONNECTICUT

Atari User Group of Greater Hartford, 503-B East Center St, Manchester 06040 (203) 623-8833

ST Atari Road Runners, Glen Werner, 1160 South Curtis St, Wallingford 06492.

FLORIDA

Atari Boosters League East, Hadley Nelson, P.O. Box 1172, Winter Park 32790.

ILLINOIS

Central Illinois Atari Users Group, Robert Handley, 1920 East Croxton Ave, Bloomington 61701–5702 (309) 828–4661.

Lake County ACE, Dwight Johnson, PO Box 8788, Waukegan 60079 (312) 623–9567. ST Information Group, Joe Lambert, P.O. Box 1242, Peoria, 61654 (309) 346–4326.

INDIANA

Atari Lovers of Illiana Equaled by None, Jeff Coe, 706 Center St., Crown Point, 46307 (219) 663-5117.

Eli Lilly Corp Center ST Users Group. Karl Werner, Eli Lilly Corp Cntr, Indianapolis 46285 (317) 276–3020.

IOWA

Midwest Atari Group-lowa Chapter, Gordie Meyer, PO Box 1982, Ames IA 50010 (515) 232-1252.

KANSAS

Ft. Leavenworth Atari Group, PO Box 3233, Ft Leavenworth 66027.

Lawrence Atari Computer Club, Robert Drake, PO Box 1415, Lawrence, 66044 (913) 842– 5961.

Wichita ACE, Marilyn Merica, 501 Trotter, Maize 67101 (316) 722–1078.

KENTUCKY

Atari Exchange of Louisville, Don Garr, PO Box 34183, Louisville 40232.

MARYLAND

Atari Users Regional Assoc, Bill Brown, PO Box 7761, Silver Spring 20910 (301) 279-7537.

Frederick Atari Computer Enthusiasts, Buddy Smallwood, PO Box 2026, Frederick 21701 (717) 485-4714.

Maryland Atari Computer Club, James Hill, 8591 Wheatfield Way, Ellicott City 21043 (301) 461–7556.

Meade Atari ST, Bob Johnson, 1616B Forrest Ave, Ft. Meade 20755

Southern Maryland Atari Users Group, San Schrinar, 2032 Alehouse Ct, Waldorf 20601 (301) 843-7916.

MASSACHUSETTS

Acton-Boxboro Atari Computer Users Society, Dave Burns, PO Box 1523, Westford 01886 (508) 937-8046.

MICHIGAN

Michigan Atari General Information Conference, (MAGIC), Mike Lechkun, 4801 Martin Rd. Warren 48092-3491.

MINNESOTA

SPACE/MAST, James Schulz, 3264 Welcome Ave., N., Crystal 55422 (612) 537-5442.

MISSOURI

ACE St Louis, Joan Ryan, PO Box 6783, St. Louis, MO 63144 (314) 645-6431.

Warrensburg/Whiteman Atari Computer Owners, Les Lynam, PO Box 199, Warrensburg 64093 (816) 747-2543.

NEW JERSEY

Jersey Atari Computer Group, 8 Crescent Rd. Pine Brook 07058.

NEW YORK

ACE Users Group of Syracuse, Bernice Futterman. PO Box 658. Sylvan Beach 13157 (315) 762–4878

Atari Computer Owners of Rochester NY, Kathy Scoville, PO Box 23676, Rochester 14692 (716) 354–5513.

Rockland Atari Computer Users Group, Richard Bloch, 29 Riverglen Dr., Thiells, NY 10984 (914) 429–5283.

NORTH CAROLINA

Blue Ridge Atari Computer Enthusiasts, Bill Traughber, 106 Alpine Way, Asheville, NC 28805 (704) 298-0179.

Charlotte AUG, Joe Venturelli, PO Box 240313, Charlotte 28224 (704) 366–4320.

Peidmont Triad AUG, Danny Hartman, PO Box 1073, Greensboro, 27402 (919) 722-9902.

Triangle Computer Club, Donald Nelson, Rt. 3, Box 760, Hillsborough 27278 (919) 942-2764.

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